DOCUMENT RESUME

ED 054 021 SO 001 525

AUTHOR	Sweeney, Leo J.
TITLE	Republic of India. A Study of the Educational System of India & Guide to the Academic Placement of Students from India in United States Educational Institutions.
INSTITUTION	American Association of Collegiate Registrars and Admissions Officers, Athens, Ohio.
PUB DATE	70
NOTE	395p.; World Education Series
AVAILABLE FROM	Executive Secretary, American Association of Collegiate Registrars and Admissions Officers, One Dupont Circle, Washington, D.C. 20036 ($1.00)
EDRS PRICE	EDRS Price MF-$0.65 HC-$13.16
DESCRIPTORS	Academic Records, Administrator Guides, *Admission (School), *Comparative Education, Credentials, *Degree Requirements, Degrees (Titles), Educational History, Educational Trends, Elementary Education, Evaluation Methods, General Education, Higher Education, *School Systems, Secondary Education, Student Evaluation, *Student Placement, Technical Education, Vocational Education
IDENTIFIERS	Educational Systems, *India

ABSTRACT

The purpose of this publication, as in the case of the other "World Education Series", is to provide a guide for the use of admissions officers and others in the admission and placement of the students of a particular country for study in educational institutions in the United States. Specifically it is hoped that this volume will furnish the basis of sounder assessment of the quantity and the quality aspects of Indian educational institutions, and the Indian student and his academic record. The first seven chapters provide a description of the historic and contemporary educational scene. The last two chapters deal with problems peculiar to Indian credentials and provide the focus for the entire work, the specific placement recommendations based on various credentials and degrees from Indian institutions. Thirteen appendices provide 240 pages of information for evaluating the students' credentials, e.g., list of institutions and samples of credential forms. (Author/DJB)

ED0 54021
SP 001 525

REPUBLIC OF INDIA

A Study of the Educational System of India and Guide to the Academic Placement of Students from India in United States Educational Institutions

1971
WORLD EDUCATION SERIES

A.A.C.R.A.O.
1910

A SERVICE OF THE INTERNATIONAL EDUCATION ACTIVITIES
GROUP OF THE AMERICAN ASSOCIATION
OF COLLEGIATE REGISTRARS AND ADMISSIONS OFFICERS

385

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ED0 54021

REPUBLIC OF INDIA

A Study of the Educational System of India and Guide to the Academic Placement of Students from India in United States Educational Institutions

1970

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1967-68 and 1969

Placement Recommendations Approved by
The Council on Evaluation of Foreign Student Credentials
July 30-31, 1970

Admissions, Evaluation and Placement—John Walker, Assoc. Program Officer

Preface

CONTEXT FOR THIS VOLUME

Perhaps the background out of which this volume has been written should be described at least briefly. Such a description may lead to a greater understanding by the reader of the admission and placement recommendations as well as of the text itself.

Together with my family, I was privileged to spend my sabbatical leave during the academic year 1967-68 as a Fulbright Lecturer-Consultant to the United States Educational Foundation in India (USEFI). My principal assignment was to establish student advising offices in the six largest cities in India (Bangalore, Bombay, Calcutta, Hyderabad, Madras and New Delhi) for the thousands of Indian students who each year consider study in the United States especially at the graduate level. The nature of this assignment gave me a truly unique opportunity to travel the length and the breadth of the Republic of India; to visit scores of universities, colleges, higher institutes, research laboratories, secondary and primary schools and other educational institutions; to meet with educational leaders at all levels within that country; and otherwise to have an introduction in depth to the social, cultural, governmental, religious and educational aspects of India that perhaps few Americans have been so fortunate to have in that period of time.

Yet I was further fortunate to have the chance to return to India during 1969 primarily to evaluate the USEFI Evaluation, Testing and Advising Project approximately one year after the majority of the student advising offices had been opened. A secondary objective, but one especially germane to this volume, was the visiting of additional Indian institutions and the seeking of additional information and reference material on the educational system of that country.

The reader may be interested in knowing about the "tests" to which much of the material in this volume has been submitted. A paper on "Evaluation of Indian Higher Education" was presented at both the 1969 Annual Meeting of the American Association of Collegiate Registrars and Admissions Officers (AACRAO) in Dallas and the National

Association for Foreign Student Affairs (NAFSA) 1969 Conference in Boston. The reactions to those presentations and to the paper as printed in the Summer 1969 issue of *College and University* (the AACRAO Journal) have been invaluable to me in refining the mountain of information and data available on the Indian educational system. Two admissions workshops also have contributed in this respect. The Third Hawaiian Workshop sponsored by AACRAO and NAFSA in cooperation with the East-West Center in Hawaii in December 1969 included India in its in-depth study of certain Asian countries. The reactions of the workshop participants to the material I presented, as the resource person on India, and the experience gained in assisting in the writing and editing of the Third Hawaiian Workshop Report have contributed substantially to the development of this volume. In a similar way the "mini-workshop" based on the Third Hawaiian Workshop that was conducted in Chicago in March 1970 under the auspices of AACRAO, NAFSA, the College Entrance Examination Board and the Institute for International Education served as a sounding board for facts and conclusions about the Indian educational system.

AN OFFER TO CREDENTIAL EVALUATORS

As Dr. Clyde Vroman so aptly has pointed out in the preface to his monumental work on Japan in this *World Education Series,* "only the crucial test of extensive, practical use" can reveal how well a volume such as this serves its purposes. Because of my personal interest in this repect, I would welcome in the case of India (as Dr. Vroman does in the case of Japan) reports on any major problems encountered in the evaluation of Indian credentials which cannot be resolved by the use of this book, so that additional information and assistance may be provided to the U.S. admissions community in the years ahead. Please note that this is not an offer to furnish credential evaluation services, but rather an offer to assist in the resolution of major problems in credential evaluation which this volume does not seem to answer.

ACKNOWLEDGMENTS

Without question I am deeply indebted to more persons than available space will allow me to acknowledge. However, I wish to identify at least a few to whom I especially am obligated. Dr. Clyde Vroman, who as AACRAO Group II Chairman in 1966 encouraged me to become active in Group II International Educational Activities and who has been a continuing inspiration to me, will have my lifelong appreciation. For their part in my selection as a Fulbright Lecturer-Consultant in 1967-68 I owe special thanks to Mrs. Cassandra Pyle, Assistant to the Dean of Students for Foreign Admission and Foreign Study, University of Chicago, and Dr. Margaret Cormack, the USEFI Director in 1966-67 when I was selected for that award.

For their parts in my introduction to India and its system of education I owe a lasting debt to Dr. W. Robert Holmes, USEFI Director since 1967-68, and Dr. Promila Gupta, USEFI Evaluation, Testing and Advising Project Officer. Others in India who have rendered invaluable assistance include: the staff of the USEFI New Delhi headquarters; the USEFI Student Advisers and especially Dr. Nalini Shetty in Madras; Dr. Amrik Singh, Secretary, the Inter-University Board of India and Ceylon; Dr. P. J. Philip, Joint Secretary, University Grants Commission; and Dr. Robert R. R. Brooks, then Chairman of the USEFI Board and the United States Chief Cultural Affairs Officer in India. To Frederick J. Tatlow and Katherine S. Snider of the Association of Universities and Colleges of Canada, I offer my deep appreciation for the opportunity to cooperate with them on a research project related to India and to share resource materials. A special acknowledgment in the form of a dedication of this book to her goes to my wife, Anna Belle. Her willingness and that of our family of four children (Kathleen, Janice, Michael and Susan) to sacrifice financially and otherwise so that the Sweeney family might have the chance of a lifetime "to experience another world" and her understanding of the long hours and days required for this volume really have made all of this possible.

Leo J. Sweeney
Kansas City, Missouri

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CHAPTER 1

Introduction

PURPOSE

The purpose of this publication, as in the case of the other *World Education Series,* is to provide a guide for the use of admissions officers and others in the admission and placement of the students of a particular country for study in educational institutions in the United States. Specifically it is hoped that this volume will furnish the basis for sounder assessment of the *quantity* and the *quality* apects of Indian educational institutions and the Indian student and his academic record than has been possible heretofore.

THE USE OF THIS STUDY AND GUIDE

First of all, the user is urged to utilize two references as companions to this volume. The first is an excellent publication in the series of United States Office of Education reports on education in other countries: *Higher and Professional Education in India* by William J. Haggerty, Washington, D.C., U.S. Government Printing Office, 1969 (Superintendent of Documents Catalog No. FS5.214:14141). That volume, as its "Foreword" states, "discusses the development of higher education against the background of both relevant political and educational history and the educational needs in a country progressing at a rapid rate economically and technically." The second reference is the *Universities Handbook*: *India and Ceylon* published by the Inter-University Board of India and Ceylon, New Delhi, India. That handbook, issued every two years, contains a wealth of descriptive information on Indian universities. Information on the cost and source of these publications is contained in Chapter VIII.

Following the lead of Clyde Vroman's *World Education Series* volume on Japan,[1] the following major steps are recommended in the use of this guide in the admission and placement of Indian students.

1. *Refer to the Appendices to find the institutional description of the university or institution.*

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[1] Clyde Vroman, Japan: *A Study of the Educational System of Japan and Guide to the Academic Placement of Students from Japan in United States Educational Institutions* (Washington, D.C.: American Association of Collegiate Registrars and Admissions Officers, 1966).

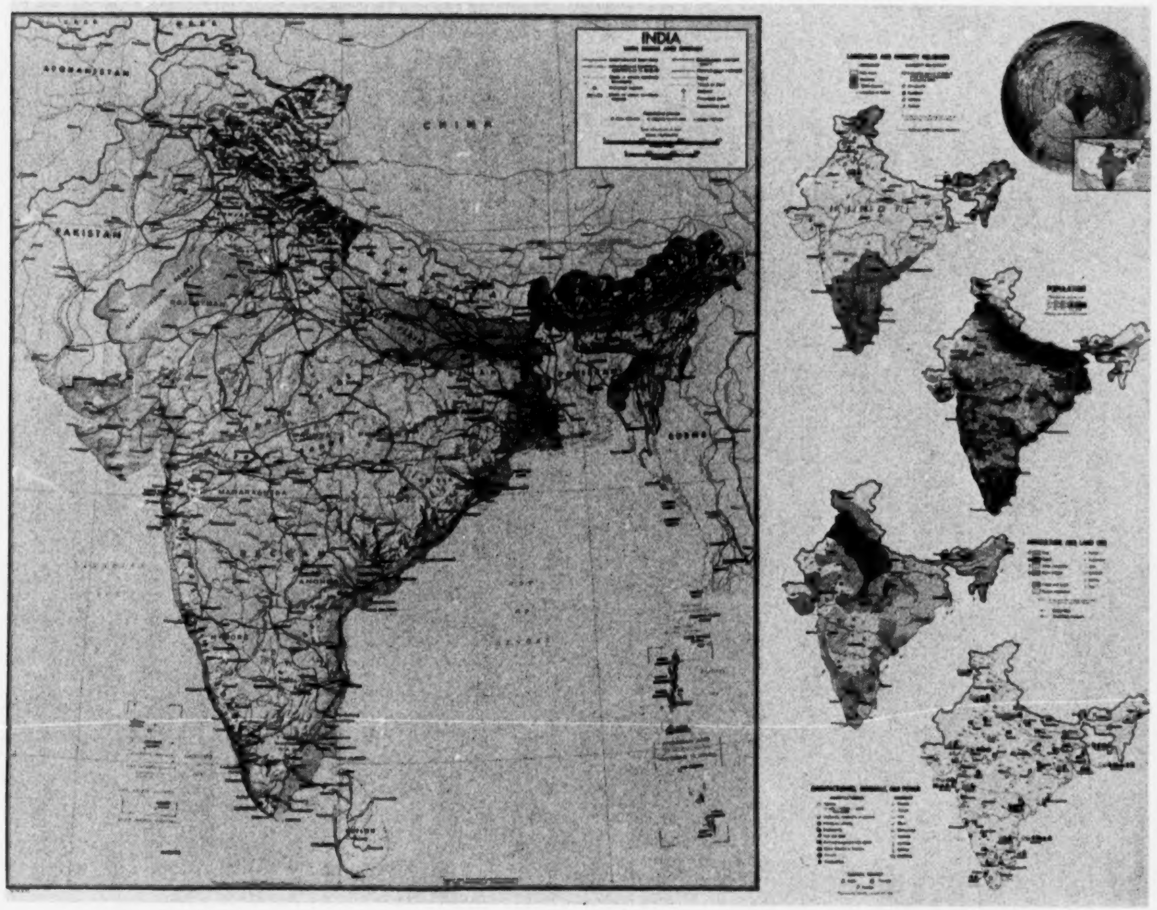
2. *Access the nature and quality of the institutions attended.*

On the basis of the information in the institutional descriptions and from other available sources and applying the institutional quality clues contained in Section A of Chapter IX (Admission and Placement Recommendations), estimate the quality of the institution(s) in which the student has studied.

3. *Assess the quantity and quality of the student's credentials.*

Utilizing the quantity and quality clues and other guidelines in Sections A and B of Chapter IX (Admission and Placement Recommendations) and in Chapter VIII (Guidelines and Suggestions for Admissions Officers), estimate the quantity (the years of education and their content) and the quality of the student's educational record.

4. Decide on the admission and placement of the student in terms of your institutional criteria.


INDIA
AFGHANISTAN
PAKISTAN
CHINA
POPULATION

CHAPTER II

India—Its Land and Its People

INTRODUCTION

The condensation of even the key aspects of India, or Bharat as the country sometimes is called, into a single chapter has been a most difficult task. The purpose of this chapter is to describe the land and people of India in a manner that may lead the reader to a fuller understanding of the Indian student both of today and of tomorrow .

PHYSICAL INDIA

The second most populous of all the countries in the world and the seventh largest in geographical size, India is roughly three times the size of the United States in population but about one-third its size in land mass. Located entirely in the northern hemisphere, it is bounded by West Pakistan, Afghanistan, China, Tibet, Nepal, Sikkim, Bhutan, Burma and East Pakistan on its land frontier of over 9,000 miles. Jutting as it does from the Himalayan Mountains in the north to Cape Comorin some 2000 miles south, India has a coastline of over 3500 miles on the Bay of Bengal on the east, the Indian Ocean on the south and the Arabian Sea on the west. Besides the mainland, India also includes the Andaman and Nicobar Islands in the Bay of Bengal (over 600 miles from India's mainland) and the Laccadive, Minnicay and Aminidivi Islands in the Arabian Sea fairly close to India's southwest coastline. Ceylon, India's independent island neighbor off its southeast coast is but a few miles away.

The mainland has three rather well-defined geographic regions. The great mountain zone of the Himalayas ("the abode of snow") includes not only three almost parallel ranges with some of the highest peaks in the world but also large plateaus and valleys such as the Kashmir and Kulu valleys that are fertile, extensive and scenic. The Indo-Gangetic plain is formed by the basins of the three distinct river systems of the Indus, the Ganges (or Ganga) and the Brahmaputra. This plain, stretching over 1500 miles in length and about 150 to 200 miles in width, is one of the world's largest areas of flat, water-deposited soil and also one of the most densely populated areas in the world. The third geographic region is the southern peninsula. This plateau area is separated from the Indo-Gangetic plain by mountains and hill ranges. This physical separation has played a most significant role in the historical and cultural difference between the peoples of northern and southern India. On either side of the peninsula are the Eastern and Western Ghats, two coastal ranges of mountains. Coastal strips exist between the ghats and the ocean on both sides.

The rivers of India, so important in the literature and religious life of the Indian people over the centuries and now so essential for irrigation and power, include the Ganges, which is considered the holiest and the mightiest of the Indian rivers. The confluence of the Ganges and its major tributary the Jumna, at Allahabad in north central India is visited by hundreds of thousands of pilgrims annually. The Brahmaputra is 1800 miles long (about 250 miles longer than the Ganges) and flows south-southwest from its source in Tibet to join the Ganges before it empties into the Bay of Bengal. The Indus now lies mostly in West Pakistan though the Sutlej tributary flows through northwest India. The six peninsular rivers have broad shallow valleys which, because of erosion over the centuries, tend to flood during the rainy monsoon season. Of the eight major soil types found in India, three—including the river-deposited soil—are basically fertile. Irrigation and fertilizer, however, are required to yield good crops even from those three soil types. About one-fifth of the Indian mainland is forested, ranging in nature from the thorny scrub of the near-desert area of the northwestern plains to the tropical rain forests of northeast and southern India.

Though lying entirely within the northern hemisphere, India has marked climatic variations. In the south (where the Cape of Comorin is within 8° of the equator) especially on the Madras coast, a year-round tropical climate prevails. In the north, the sub-freezing winters of the Himalayan area present the other extreme. The four broad climatic regions based on variation in precipitation include the Assam and West Coast area that includes Cherrapunji in Assam with the highest annual rainfall in the world, and the northern plains area where the desert region receives less than ten inches of annual rainfall. The monsoon winds, the seasonal winds that flow from the land to set in winter and from sea to land in summer, play an almost literally life-and-death role in this subcontinent; especially does the southwest rain-laden summer monsoon in June and July. The Indian Meteorological Department divides the Indian year into four seasons: the (relatively) cold weather season

(December-March); the hot weather season (April-May); the rainy season (June-September); and the season of the retreating southwest monsoon (October-November).

HISTORICAL INDIA

Westerners often overlook or are unaware of the fact that the subcontinent of India has had a continuous civilization for at least 5000 years. Archaeological findings strongly suggest that as early as 3000 B.C. a civilization or civilizations existed there with a developmental level at least comparable to that of the early civilizations in Egypt and Mesopotamia. This Indus valley civilization is believed to have flourished from about 3000 B.C. to about 1500 B.C. when the Sanskrit-speaking Aryans from Central Asia swept into the area through the passes in the northwest as the first of many foreign invasions to come. The Aryan period from about 1500 B.C. to 500 B.C. is also known as the Vedic period because of the role played by the Vedas (the oldest sacred writings of Hinduism). This period is noted for the start of the caste system and the birth of Hinduism as a synthesis of the Aryan and indigenous religions.

The world-famous conqueror, Alexander the Great, reached the Indian subcontinent on the easternmost of his conquests in 326 B.C. though his stay was ephemeral. The first of the Indian empires, the Mauryan Empire, began shortly thereafter under Chandragupta Maurya whose capital was today's Patna in Bihar State. A number of Indian empires followed the Mauryan Empire, until the start of the Muslim Period in Indian history about 711 A.D. The Arab invasion brought with it Islamic culture, education and religion as well as a rule destined to last until the arrival of the Europeans, especially the British, in the 17th century. This era of nearly ten centuries of Muslim predominance was more pronounced in the north than in south India. Incidentally, it was during this period (1648) that the incomparable Taj Mahal was completed in Agra by one of the Muslim kings as the world's most elegant tribute to a departed wife.

The Portuguese in 1498 through their maritime great, Vasco da Gama, were the first Europeans to establish a substantial contact with India. However, neither the Portuguese (who held Goa until 1961) nor the Dutch and the French who came later were to have a fraction of the control and influence over this vast area as were the British.

Although the first British settlement was in Surat on the west coast in 1612, the British East India Company was on the scene somewhat earlier. From 1757 and the famous battle at Plassey until Independence in 1947, the Indian subcontinent was a British colony. For nearly a century it was under the jurisdiction of the British East India Company, a private company granted a charter by Queen Elizabeth I in 1600. In 1858 after the Sepoy Mutiny (considered by many historians as the first war of independence in the Indo-Pak subcontinent) the British Crown assumed direct control and appointed their first viceroy or governor general to exercise their rule over all of that area except the some 500 "princely states" whose domestic sovereignty remained untouched until the advent of Independence.

That British India was treated primarily as a colony for the benefit of the English seems quite indisputable. However, it also seems quite clear from the record that the British period brought considerable unification, development, and governmental stability to the country. The rise of the movement for independence perhaps began with the unsuccessful attempts by the Indian National Congress (founded in 1885) to obtain more self-government. With Mohandas Karamchand Gandhi, or Mahatma Gandhi as he generally was called, as its charismatic philosopher and leader, the Congress started the famous non-violent and non-cooperation movement in 1920. It was to be the role of such younger nationalists as Jawaharlal Nehru to stimulate a more militant opposition to the British rule. An ever-accelerating struggle continued through the next two decades culminating in the famous "Quit India" resolution in 1942 and a mass non-violent resistance through the rest of World War II.

The year 1946 saw the start of the negotiations that were to lead to the independence of India and Pakistan. Because of irreconcilable differences between the Congress movement, primarily representing Hindu interests, and also the Muslim League, two nations were carved out of the subcontinent. After the August 15, 1947 partition into two self-governing dominions within the British Commonwealth, this area was to experience one of the bloodiest migrations of people in modern times. Over ten million people were involved as Muslims sought to move from India to Pakistan, and Hindus and Sikhs from Pakistan to India. Perhaps more than one million people died in the violence that accompanied this mass migration. It was to require the death of Mahatma Gandhi by an assassin's bullet in January 1948 to calm the people. "Communal" difficulties still arise in India where nearly 50 million Muslims still live in a minority role and in Pakistan where over 10 million Hindus are a minority element.

Recent Indian history is largely recorded elsewhere in this chapter as part of such sections as "Governmental India," "Economic India" and "Social and Cultural India." However, certain other events since independence deserve notice here. India engaged in wars both with China and with Pakistan in the 1960's. Though neither conflict caused any serious loss of manpower, the cumulative effect on the overall development of India has been widespread. Negative effects have included a worsening of communal relationships within India between Hindu and Muslim communities, shortfalls in the economic endeavors within the Third Five-Year Plan period (1961-1965), and the irregular and unbalanced growth of the educational system as is outlined at greater length in Chapter VII.

Jawaharlal Nehru, mentioned earlier as one of the early leaders in the nationalism movement, served as Prime Minister of India from 1947 until his death in 1964. Noted in foreign politics for his policy of nonalignment, Nehru was a popular leader of India throughout most of that period. However, some critics feel that his was too much a one-man government for too long a time and that he failed to adequately groom someone to follow him—a dire necessity in a complex country so beset with problems as is India. After the death of Lal Bahadur Shastri in 1966, who had served for two years as Prime Minister, Nehru's only child, Indira Nehru Gandhi (no relationship to Mahatma Gandhi), assumed the Prime Minister position as head of the Congress Party. That party, though still in control of the Union government as the 1960's closed, commanded a much smaller percentage of the national votes and controlled fewer State governments than ever before. Perhaps only the multiplicity of political parties accounts for the continued Congress dominance even at the reduced level.

POPULATION

Without challenge, India is the second most populous country in the world. The exact size of her population is not certain. Officially, the 1961 census showed the total population to be 439,235,000. In its *Fourth Five-Year Plan Draft,* the Planning Commission of the Government of India estimated the 1968 population to be 527 million. This information would indicate that an accurate count of the 1970 population would yield a total of about 600 million. Seven of the Indian States are larger than any one of 100 member countries in the United Nations. All of the available world demographic data suggests that not only does one out of every seven people alive on the earth today live in India, but one out of every three lives either in India or its immediate neighbor, China. The real meaning of such a population and of its almost geometric rate of increase is difficult to comprehend. For example, the annual population increase of approximately 13 million people is equivalent to the combined populations of the three largest cities in the United States.

The population density according to the 1961 census averaged 347 persons per square mile. While some other countries had higher averages, they were small, highly urbanized and industrialized. In India the areas of highest density were those with the most fertile land as in the Indo-Gangetic plain. Large rural areas in that plain and on the Kerala coast in southwest India had population densities exceeding 1000 persons per square mile.

Over 80% of the Indian population is rural. This predominately rural setting includes nearly 600,000 villages, the majority of which have fewer than 500 people. More than half of the city dwellers live in about 100 cities of 100,000 or more population. Seven of these have over one million residents; Calcutta, Greater Bombay, New Delhi, Madras, Hyderabad, Bangalore and Ahmedabad in that order. More than half of the population is in the working age group of 15 to 60.

The rate of population increase is spectacular when one considers that the percentage of males surviving to age 20 in India is perhaps only two-thirds that of the typical European country or the United States. Only the fact that the death rate in India is perhaps twice that of countries such as the United States has kept the population increase from soaring even further. However, all signs indicate that the Indian mortality rate will follow the downward trend of other developing countries and thereby accelerate the population increase unless offset by the scourges of poverty and malnutrition. While India is one of the few nations in the world officially supporting family planning and birth control, the problems facing such efforts are monumental and are discussed at some length in Chapter VII.

LINGUISTIC AND ETHNIC INDIA

Another reason that India might be categorized as "India: Another World" is its linguistic and ethnic characteristics—its linguistic and ethnic composition may be the most complex in the world. The vast majority of the people belong to one of two major language groups—Indo-European and Dravidian—but this in itself leads to further complexity. Not only are those two language groups decidedly different as a whole, but within each of the two are further sub-divisions and sub-cultures.

The ten Indo-European languages and the four Dravidian languages, specified in the Eighth Schedule of the Constitution of India as among the fifteen regional languages, are used by over 90% of the population and have been the linguistic basis for the Indian states. While it often is claimed that there are over 800 languages and dialects used in India, a total of over 700 probably are used by less than 1% of the total population and lack their own literature and other characteristics of a distinct language. The seventeen Indian states and their predominant language are listed below:

States	*Language*
Andhra Pradesh	Telegu
Assam	Assamese
Bihar	Hindi
Gujarat	Gujarati
Haryana	Hindi
Jammu and Kashmir	Hindi/Urdu
Kerala	Malayalam
Madhya Pradesh	Hindi
Madras	Tamil
Maharasthra	Marathi
Mysore	Kannada
Nagaland	Hindi
Orissa	Oriya
Punjab	Punjabi
Rajasthan	Hindi
Uttar Pradesh	Hindi
West Bengal	Bengali

At this point the territories and islands of the Union should be identified for the reader: Andaman and Nicobar Islands; Dadra and Nagar Haweli; Delhi; Goa, Daman and Diu; Himachal Pradesh; Laccadiva, Minicay and Amindivi Islands; Manipur; Northeast Frontier Area; Pondicherry; and Tripura. The countries of Bhutan and Sikkhim, under treaties signed in 1949 and 1950 respectively are in effect protectorates of the Government of India with varying degrees of autonomy in the internal affairs.

As for major radical groups, the vast majority of the population are Caucasian in origin. In the Himalayan areas of the north, people of Mongoloid stock exist, though not in large numbers. Even fewer Indians come from Negrito and Proto-Australoid origins. In the discussion of Social and Cultural India later in this chapter, the religious aspect of India's ethnic, social, and cultural nature is explored. The problems related to the multiplicity of language and the role of the English language are treated in Chapter VII.

SOCIAL AND CULTURAL INDIA

The complex culture of this country can be alluded to but hardly described in this volume. Religion has played a most important role in the social and cultural development of India. The Hindus are the largest single religious group, consisting of perhaps 84% of the people. Perhaps the best summary of the essence of the Hindu religion can be found in a book published by the Council for Cultural Relations and entitled *Towards Understanding India*:

> "There are many sects and cults in Hinduism. They call the Divine by various names, prescribe various practices and sometimes quarrel among themselves. But they all accept the Vedas, Upanishads and the Gita as authorities. The more perceptive of their followers also agree that no one can go to damnation finally, for everyone will be saved at sometime or other. They also agree that God need not be approached in one and the same way by all human beings, because their needs and aspirations and their mental and spiritual development are not identical. The Divine ministers to everyone but in the way most appropriate to each one. Enjoy the things of this world, but do not be attached to them; follow the aesthetic and the sensual but do not become their slave and remember they are God's gifts to you; follow the Law of your own being, i.e., remain true to yourself at all times; seek the good life

> here on earth, but aspire for the Eternal; transcend the finite and enter into communion with the Transcendent. Such is the central message of all Hindu sects and cults. Popular Hinduism may appear in some of its forms to be mere idol worship. While it cannot be denied that perhaps the majority of Hindus, like the followers of every religion, have not been able to transcend law and ritual and ascend to the spiritual plane, it is well to remember a great mystic, Sheikh Mahmid Shabestari, said: 'Oh Muslim, if you know what an idol is, you would know that religion is idol-worship' ".

Muslims comprise the next group consisting of about 1% of the population. Christians account for an estimated two to three percent of the Indian people; some of them trace their origins back to the Apostle Thomas, who according to tradition, landed in India in 52 A.D. The Sikhs, noted especially for the sturdy physique, turbans, and long hair, number about as many as the Christians. They are concentrated primarily in the Punjab area in the north. Other religious sects include the Jains, who are considered by many as a sect within Hinduism, Buddhists, and Parsis.

Any discussion of the social and cultural fabric of India must stress at the outset that diversity and not unity characterizes that fabric. For that reason, generalizations, though necessary here because of the limitations of space, can be misleading. Yet there seem to be three social systems even today: the village community system, the caste system, and the joint family system.

Over 70% of the Indian people live in villages. The nucleated village has its people clustered together into one or a few settlements with the farm land surrounding the village. In the past, the objective was to have an economically self-sufficient community with its own artisans as well as producers of food and other necessities. The move to cash crops has change this arrangement considerably. Other characteristics of the village have been: a village council or panchayat to settle disputes and organize cooperative projects, the village temple, the village school (if the village is large enough), and the castes.

Even though "untouchability" was abolished, its practice in any form forbidden by the Constitution of India, and discrimination on the grounds of caste prohibited, the caste system has persisted. Each village has a number of castes such as peasants and potters. Sub-castes also are a part of this system and one authority has estimated that each linguistic area may have as many as 2000 sub-castes. While inter-caste marriages are allowed and do occur, most marriages still take place within castes though often with caste members in different villages. The correlation between caste and occupation is still high but declining as industrialization increases.

The joint Hindu family is a residential unit wherein all members of as many as three generations may live together under the same roof. Food, worship, and property are shared in a traditional joint family. While this third social system still is widespread, especially in rural India, increased occupational and geographical mobility has decreased its prevalence. Crowded housing arrangements in the urban areas have made further inroads into the joint family system.

With the rise of the large urban center and the industrial cities, a new middle class and a new working class have formed. More Western-oriented than the rural areas, and based on an industrial and commercial economy quite different from the village, the large Indian city has a population that increasingly differs in its social and cultural life.

The culture of India rivals its social system in complexity and is reflected to a great extent in the literature. The literature of India dates from the Vedas written in Sanskrit about 1500 B.C. Besides a long tradition of ancient and medieval Sanskrit literature, a rich Buddhist and Tamil tradition in literature also preceded the modern era. Notables in the modern era include Rabindranath Tagora who was awarded the Nobel Prize for literature in 1913. While some authors still write in English, the trend is to the use of the regional languages.

India's sculpture, architecture and painting have had a rich history. The cave architecture at Ajanta, the cave wall paintings at Ajanta and Ellora, the Shore Temple at Mahabalipuram, the temples at Khajuraho, the Mughal and Rajasthani miniature paintings, and the Taj Mahal are but a few examples from that history. The history of accomplishments in dance, drama, and music, similarly is lengthy and impressive. The classical dance—actually a dance drama—still thrives in India, especially in its four main classical forms: The Bharatanatya, the Kathakali, the Kathak, and the Manipuri. Indian classical music, popularized in the West by such performers as Ravi Shankar on his sitar, has an ancient tradition and base, as have folk dancing and music.

Crafts in India have been more than just the production of needed utensils, baskets, and textiles. Rather, crafts have been the means to carry forward expressions of myths, legends, and other aspects of the culture of a village or larger area. Among the world-famous crafts of the past and present are: the warp-weft tie and dye textiles of Orissa, block-printing of textiles, Bengali embroidery, Banaras silk brocades, silver filigree work of Orissa, brass and woodwork, and ivory and buffalo horn statuettes. While industrialization and other modern trends have affected the quality and variety of much of the Indian crafts, they still represent a significant aspect of Indian life.

GOVERNMENTAL INDIA

According to the Constitution of India adopted January 26, 1950 (now known as "Republic Day"), India is a secular Union of States or a federal republic with a democratic form of parliamentary government whose sovereignty lies with all the people. The 395 articles and 9 schedules of the Constitution makes it one of the longest constitutions in the world. The resulting form of government is most comparable to the British pattern but certain aspects resemble that of the United States.

Its federal form, as spelled out in lists of powers, gives the seventeen States considerable autonomy, but in case of war or other emergencies, The Union Parliament may assume the legislative power of the States and the President may take over the executive authority of the States, as has been done in several civil emergencies in recent years. The President chooses a Prime Minister and Council of Ministers, usually from members of the Union Parliament, to exercise the real executive power. The Prime Minister, inevitably the leader of the majority in the Lok Sabha, which is comparable to the United States House of Representatives, is the effective chief executive. The President, his broad powers notwithstanding, is a titular head much as the British monarch. An independent judiciary system capped by a Supreme Court completes the legislative-executive-judicial arrangement.

The Union territories are governed by the President through administrators appointed by him. The State governmental system is almost identical to that of the Union. A Governor is titular head of a State government, but a Chief Minister exercises the real executive power together with a Council of Ministers collectively responsible to the State legislature. Increasingly important in the Indian governmental structure is the *panchayat raj*. This is a pattern of local self-government that not only is responsible for the traditional role of district, block, and village government, but also for the planning and executing of developmental projects.

Suffrage is universal for all elections at every level. That neither literacy nor property holding is a voting requirement is most significant in that more than 70% of the population otherwise would be ineligible to vote. In recent elections more than 50% of the eligible voters have exercised their franchise.

ECONOMIC INDIA

In economic terms, India is a developing country. Her resources in manpower and natural resources such as iron, coal, and other metals and minerals are impressive. However, even after a series of five-year development plans, India still is one of the poorest and most underdeveloped countries in the world by such an index as per-capita income.

In 1956, the Government of India officially adopted the policy that a socialist economy was to be the national objective. Subsequently, many key industries progressively have come into the public sector. However, the private sector still flourishes. In fact most of India's industry, and especially its small industry and cottage industries, are still privately owned. The Indian economy is primarily an agricultural one in that more than half of the national income comes from agricultural endeavors and about three-fourths of the population is in the agricultural working force.

In a socialistic economy, centralized planning is a key factor in its fabric and indeed in its success. The first of the centrally-developed plans for national development in India was launched in 1951. These Five-Year Plans have been the responsibility of a Planning Commission headed by the Prime Minister. The scope of such plans has been impressive because they have touched on the following priorities for national development: (1) the role of the public and private sectors in that development, (2) the allocation of public funds for agriculture and community development, irrigation, power, social services and other aspects of national life, and (3) the institutions and organizations to be established to effect established priorities and objectives. Whether the impressive nature of the Five-Year Plans' scope has been matched by equally impressive accomplishment has been the subject of debates by many economists and other international experts. One damaging indictment in this respect has been the extent of the shortfall in the Third

Five-Year Plan (1961-1965) goals and the resultant delay in the start of the Fourth Five-Year Plan until 1968.

Because of its importance to Indian life, agriculture perhaps deserves additional attention at this point. Not only is agriculture significant because of the percentage of the Indian population directly and indirectly employed in it and because of its role in supporting the existence of the almost geometrically-expanding population, but also it is the basis for the country's main exports since about 90% of the exports are agricultural products.

The "Green Revolution" is the term used to refer to the substantial gains made in the agricultural sector of such developing countries as India. These gains have come from increases in the amount of land in cultivation, the water and fertilizer applied to that land, and the hardier wheat, rice, and other crops planted. Whether the "Green Revolution" has kept pace with the population explosion is one of the topics in Chaper VII as is the matter of technological unemployment and underemployment in industry.

Foreign aid in the form of both technical assistance and material goods has been an important factor in the development of India, especially economic development. The best known of the United States aid has been the shiploads of foodstuffs that have been furnished in an effort to assist India to feed its population until the "Green Revolution" reaches at least the subsistence level for Indian food needs. In twenty years the United States has loaned or granted about $9 billion to India including some $4.2 billion in food grains. Other countries have lent sizable amounts of money to India and the annual requirement of over $500 million for payment of that debt poses a most difficult balance-of-payments problem for India. In the United States' effort to assist India, not only has the Agency for International Development and its predecessor been important but also American foundations have played a significant role. The Ford Foundation has been active in the areas of food production, population control, urban planning, management training, and secondary and higher education. In the period 1951 to 1968, the Ford Foundation made over 400 grants totalling over $100 million, the largest support given any country outside the United States by the Foundation.

CHAPTER III

Development of Indian Education

INTRODUCTION

Indian history and culture dates back over 5,000 years and has been extremely complex and varied. The treatment of the development of education in such a country in this volume must therefore be somewhat superficial. Nevertheless, a brief look at the earlier period in Indian education, the British period, and the modern or post-independence era will give a better understanding of the Indian educational system as it is today and as it may be changing in the years ahead.

EARLIER INDIAN EDUCATION

In ancient India, the Vedas (sacred Hindu scriptures written between 1500 and 300 B.C.) were essentially the basis for education. The goal of such education was the learning of the Vedas by oral repetition with a "guru" or teacher. Education was restricted largely to the Brahmins or priest class within the Hindu religion, and its aim was to prepare the Brahmins to be priests. As the Kshatriyas (nobles and warriors) and the Vaisyas (agriculturists and traders) began to develop as full-fledged castes, the youth of these castes received their education from Brahmin teachers.

The three categories of educational institutions that evolved were the parishads—assemblies of Brahmin elders, the tols—Sanskrit religious schools also restricted to the Brahmins, and the pathsalas—primary schools available to everyone except the untouchables. The early descriptions of the village primary schools—a small number of pupils gathered around a teacher in the open, in a temple, or in a small building—suggests that they may have been the harbingers of the schools in many small Indian villages or "habitations" today.

Gautama Buddha began his religious life in India at Sarnath near Benaras and preached widely throughout India after that; however, Buddhism was never the dominant religion in India. Nevertheless, this fact did have its effect on education. Under Buddhist influence from about 600 B.C. to 700 A.D., education, though aimed at a life of solitary meditation, was not focused on the Vedas and was not dominated by any one caste either as teachers or as students. Education was available to virtually everyone. In this period, several world-famous institutions arose out of monasteries in Nalanda and Vikramshila near present-day Patna in Bihar (India) and Taxila (in what is now West Pakistan). History records that thousands of students and teachers were engaged in the pursuit of learning. Nalanda is especially noteworthy because it flourished from the 5th to the 13th century and had at one time an estimated ten thousand students and teachers including Chinese, Tibetans, Ceylonese, Koreans, and Sumatrans.

As the Muslim period of Indian history unfolded in the India subcontinent, especially in the 11th century A.D., education gained renewed emphasis, with religion and education closely related. Some of the ancient educational institutions endured, while at the same time, the Muslims established and stressed elementary and secondary schools. "Madrasahs" or colleges and even universities in locations such as Delhi, Lucknow and Allahabad used Arabic as the medium of instruction, instead of Sanskrit as in the older Hindu citadels of learning, and stressed theology, logic, rhetoric, law, geometry, astronomy and metaphysics. That the Muslims had given considerable impetus to education during their rule is perhaps borne out by the evidence that prior to the British rule in the Bengal area there was one school for about every 400 persons.

EDUCATION IN BRITISH INDIA

Scholars on the subject seem quite agreed that the educational system of India had its roots in the 19th century as the British took over the subcontinent. However, not all would agree with the negative verdict rendered by Ramendra Sunder Trivedi, then principal of Ripon College and a fellow of the University of Calcutta, in 1917-19. He has been quoted by Eric Ashby in his book, *Universities*: *British, Indian, African* as having said:

> "The University of Calcutta is altogether a foreign plant imported into this country, belonging to a type that flourished in foreign soil. The importation was an urgent necessity of the time, suddenly created by the abrupt introduction on new conditions of life with a new order of political situation; the founders of the new educational system had not the time to study the ideals and methods that were indigenous; the new system was introduced in entire ignorance and almost in complete defiance of the existing social order regulating the everyday life of an ancient people."

Yet many would agree with Ashby that, "whatever its ultimate objective," the new system displaced oriental learning almost completely as the East India Company moved from a very cautious, supportive policy towards Indian education to one that stressed Western learning and especially the preparation of Indians for civil service within the British *raj*.

The development of universities was perhaps the most notable educational feature of the British era in India. In 1817, the Hindu College in Calcutta had been founded under the dynamic leadership of Raja Rammohun Roy to provide instruction in European languages and the sciences. In Bombay, in 1834, the Elphinstone Institution was established to train Indians for the higher positions in the civil administration. It was upon the base of such institutions that, in 1857, the British created three universities, Bombay, Calcutta and Madras. These universities were to be patterned after the University of London primarily as examining and degree-granting bodies. The use of external examinations, the replacement of Indian languages by English as the medium of instruction, and the primary role of the affiliated college in the teaching of the college student were characteristics of the new system.

Another characteristic of this era was the development of an educational administrative structure. As early as 1899 the Directorate General of Public Instruction was created to advise the central government on educational matters. A number of educational commissions studied the Indian scene over the years and suggested changes, but the record indicates that few of their recommendations were adopted. Exceptions included proposal of the Indian Universities Commission of 1904 that Indian universities become teaching as well as affiliating and examining bodies. In the following two decades, the five existing universities, Allahabad, Bombay, Calcutta, Madras, and Punjab, slowly established teaching departments in response to that proposal. Also somewhat notable was the Michael Sadler Commission whose 1919 Report led to the establishment in 1921 of residential and unitary universities having all departments on one campus such as Aligarh Muslim University and Lucknow University, and to the conversion of Allahabad from an affiliating to a unitary institution. Still another far-reaching result from that same report was the birth of the Inter-University Board of India and Ceylon about which more is said later in this volume. From the last commission to function before Independence came the noteworthy

University Grants Committee. This committee was the precursor of the influential University Grants Commission and is more fully described later.

EDUCATION IN TODAY'S INDIA

Overall Developments

At Independence in 1947 the educational system in India faced substantial problems. As described in Chapter II, the subcontinent had undergone a social upheaval without equal in modern times. Only 12% of the population was literate and only 8% enrolled in some form of education. The First of the Five-Year Plans launched in 1951 allocated only 7% of the public expenditures to education. This level was reduced to about 6% in the Second Plan in the 1956-60 period. One author, Muhammad S. Huq in his book, *Education and Development Strategy in South and Southeast Asia,* argued that even the economic value of education was not clearly recognized in the Five Year Plans and stressed the fact that the Second Plan did not include education among its principal objectives. Nevertheless, in the years that followed Independence, noteworthy changes did take place. Primary and secondary education enrolllment grew from approximately 23 million, perhaps 25% of the age group 6 to 17 years, in 1950-51 to nearly 37 million, less than 40% of that age group, in 1960-61. In the same period, university enrollment expanded from about 300,000, less than 1% of the age group 17 to 23 years, to over 600,000, less than 2% of that age group. The number of universities increased from 27 in 1950-51 to 46 in 1960-61 and the number of affiliated and constituent colleges, from 542 to over 1000 in the same period. Comparable figures for 1970-71 reached 80 and the affiliated and constituent degree level colleges exceeded 2600.

Constitutional Provisions

The Constitution of India, adopted in 1950, understandably has several provisions related to education. First of all, Part III on Fundamental Rights provides that no citizen shall be denied admission "on the grounds only of religion, race, caste, language or any of them" into any educational institution which is either maintained by the Union or State government, or receives aid from the government. In addition, Part III guarantees the right of minorities, whether based on religion or language, to establish and administer their own educational institutions. Part III also guarantees that the Union and State governments in the granting of aid will not discriminate against such an educational institution because it is under the management of a minority. In Part IV, the Union and State governments are charged with the obligation to effect the right to education for their citizens "within the limits of its economic capacity and development." Related to this latter provision are Articles 45 and 46 of Part IV which state that the Union and State governments shall endeavor to provide, within a period of ten years from the adoption of the Constitution, free and compulsory education for all children until age 15. The articles also state that those governments shall promote with special care the educational and economic interests of "the weaker sections of the people, particularly the Scheduled Castes and the Scheduled Tribes." Elsewhere, the Constitution empowers the President of India, in consultation with the Governors of the Indian States and Union Territories, to specify the castes and tribes to be so treated. By means of Schedule VII, the powers of the Union and the State governments are listed and differentiated as either exclusive or concurrent. The "Union List" includes the institutions declared by Parliament to be "institutions of national importance," i.e., the universities such as Benars Hindu, Aligarh Muslim and Delhi, the coordination and determination of standards in institutions for higher education or research, and for scientific and technical institutions. The "State List" of some 66 powers includes education, but the power over universities is subject to the Union government's powers as indicated its List. The "Concurrent List" of shared subjects or powers contains vocational and technical training of labor, and jurisdiction over legal, medical, and other professions.

National Planning

In the Five-Year Plans for the development of the Indian nation, education has been labeled as crucial to the growth of the country. Yet, as has been pointed out above, the allocation of national resources under those Plans has not suggested that education really has been accepted as particularly pivotal in the economic, technological, and social advancement of the nation, as the plans otherwise seem to argue. Significant in the development of Indian education since Independence have been two major commissions appointed to study and recommend changes in the Indian educational scene.

The University Education Commission in a 1950 Report set out a series of recommendations that have been central to the evolution of Indian universities. Administration, courses of study, educational quality, examinations, financing, postgraduate training and research, as well as other aspects of higher education, were all affected. Chapter VI in its treatment of higher education elaborates on this topic.

The Education Commission appointed in 1964 by the Union Education Commission undertook a most comprehensive survey and evaluation of the entire field of Indian education. Under the chairmanship of the University Grants Commission chairman and with a membership of eleven Indians and five foreigners, this Commission set up twelve "task forces" and seven "working groups" for detailed studies of such areas as higher education, teacher training and status, school curriculum, primary and secondary education, and science education and research. Through extensive travel, conferences and interviews the Commission sought to involve a maximum number of Indian and foreign educators and other leaders. The *Report of the Education Commission 1964-1966* of over 700 pages is a treasure-trove of data on the Indian educational system, including detailed assessments of it and far-ranging recommendations for its future. Many of the Report's suggestions and recommendations are cited in subsequent chapters of this volume.

All-India Educational Surveys

As early as 1911, a comprehensive statistical survey of Indian education at the primary and secondary levels was proposed. In 1957, the First All-India Educational Survey was undertaken for the primary purpose of establishing a more rational basis for the location of schools. Then in 1965, as part of the development of the Fourth Five-Year Plan, the Second All-India Education Survey was organized. The wealth of data and evaluated findings from the latter Survey has been utilized in the writing of subsequent chapters of this work.

National Enrollment Policy

In its monumental Report, the Education Commission of 1964 announced a "National Enrollment Policy" that might be considered a national philosophy of education:

> India has committed herself to the creation of a democratic and socialistic pattern of society. The fundamental principles that should

guide the provision of facilities at the different stages and sectors of education, therefore, may be stated as follows:

—to provide effective general education of not less than seven years' duration to every child, on a free and compulsory basis, and to expand lower secondary education on as large a scale as possible;

—to provide higher secondary and university education to those who are willing and qualified to receive such education, consistent with the demands for trained manpower and the need to maintain essential standards; and to provide adequate financial assistance to those who are economically handicapped.

—to emphasize the development of professional, technical and vocational education and to prepare skilled personnel needed for the development of agriculure and industry;

—to identify talent and to help it grow to its full potential;

—to liquidate mass illiteracy and to provide an adequate programme of adult and continuing education; and

—to strive continuously to equalize educational opportunities, beginning with the elimination of at least some of the more glaring inequalities.

Ministry of Education

Primary responsibility for the Union government's role in the field of education is vested in the Ministry of Education and Youth Services. Reporting to the Prime Minister of India as a member of her cabinet, the Minister of Education and Youth Services is assisted by an array of deputy ministers, secretaries, assistant, additional and joint secretaries, joint educational advisers, and other staff. Major divisions within the Ministry include: University Education, Technical Education, National Scholarships, and Scientific Research. Illustrative of the Ministry's concerns are these described in its 1966-67 annual report: (1) the issuance of scores of statistical reports, bulletins and other publications; (2) primary responsibility for the "Institutions Declared to Be of National Importance," the "Institutions Deemed to Be Universities," and a host of national laboratories, research stations, institutes, libraries and museums; (3) allocation of Union funds to higher education through the University Grants Commission; (4) liaison with other Ministries having prime responsibility for education in their fields, such as Health and Agriculture, and with the Council of Scientific and Industrial Research; and (5) financial assistance to the States for the expansion and improvement of education at all levels. A Central Advisory Board of Education established in 1935 is the main advisory body for the Ministry of Education and Youth Services. This Board consists of representatives of the Union and the State governments (generally the State Education Ministers), representatives of the Indian universities and the Parliament, and other prominent educators.

National Council of Educational Research and Training

This council is referred to as "the professional arm of the Union Ministry of Education" in the Ministry's 1966-67 Report. Through eleven departments, an Educational Survey Unit, the Central Institute of Education (which is a constituent college of Delhi University), and four Regional Colleges of Education, this influential Council focuses mainly on four aspects of primary and secondary education. The aspects are educational research; pre-service and in-service training in education; extension work in education; and the production of educational literature including textbooks.

University Grants Commission

In the field of higher education, the University Grants Commission has exerted ever-increasing influence since its original formation as the University Grants Committee in 1945 and then its reestablishment in 1956 as the University Grants Commission. While the UGC by law is responsible to the Union government through the Union Ministry of Education, it has a great deal of autonomy as it exercises its legal authority. Authority under the UGC Act encompasses the allocation and disbursement of grants to universities for their maintenance and development, the recommendation to any university of measures for the improvement of that university's education, the inspection of universities regarding financial needs and standards of teaching, examination and research, the expansion of existing universities and an advisory role in the establishment of new institutions and the performance of "such other functions as may be deemed necessary by the Commission for advancing the cause of higher education in India." One index of the UGC's power is the fact that since its reestablishment in 1957, its expenditures on higher education have nearly quadrupled. While sizable amounts have been required for the support of the central universities of Aligarh Muslim, Banaras

Hindu, Delhi, Jawaharlal Nehru, and Visva Bharati and the "institutions deemed to be universities," the UGC nevertheless has been able to assist in the improvement especially of science programs in the universities, the upgrading of faculty salary scales, the development of Centres of Advanced Study in certain universities (which are described in Chapter VI) and the construction of not only instructional but also student services, student housing and other facilities at Indian universities. All signs suggest that the future expansion and improvement of higher education in India will depend heavily on the leadership role of this Commission.

Inter-University Board of India and Ceylon

Another significant educational body at the national level is the Inter-University Board of India and Ceylon. Established in 1925 as a consultative board, its membership consists of the chief executives of virtually all Indian and Ceylonese universities. Without the executive powers and financial leverage of the UGC the IUB has been a valuable form and catalyst for educational reform and cooperative effort. One of its most important roles has been representing the views of the universities to the UGC and the Union government.

Other National Bodies

Before leaving the national level, two other bodies with noteworthy functions in education should be mentioned at least briefly. The Council of Scientific and Industrial Research was set up in 1942 as an autonomous organization to promote, guide and coordinate scientific and industrial research including the initiating and financing of specific research. Its governing body is composed of scientists, industrialists and administrators with the Prime Minister of India as its President and the Union Minister of Education as its Vice-President. In 1966-67 among other activities CSIR directed the functioning of thirty-four national laboratories and museums involved in a vast range of scientific research. The relationship of this research to the universities and their advanced students is explored in subsequent chapters as are the CSIR's National Registry of Scientific and Technical Personnel and its scientists' Pool.

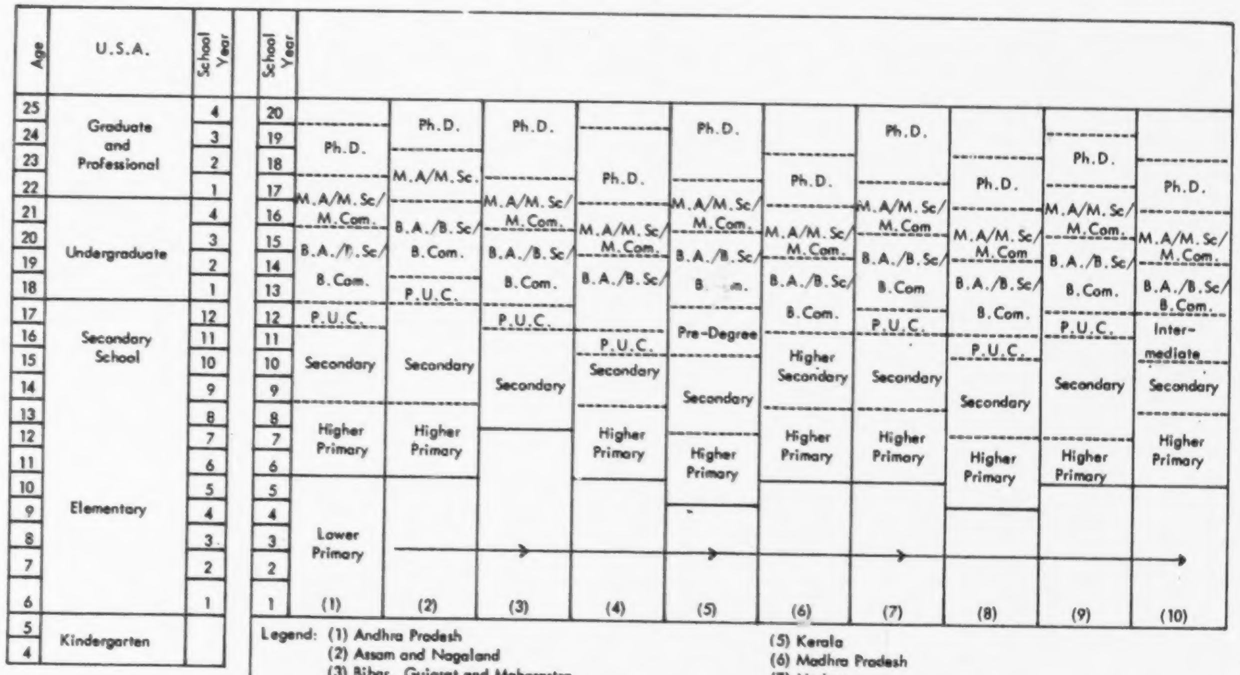
In the field of technical education the All-India Council for Technical Education has played a rather significant part in recent years. Composed of representatives of Parliament, the Union government (especially the Ministries concerned with technical education), the State governments, the University Grants Commission, industry, commerce, labor and others, this Council has sought to coordinate Indian engineering and technical education at all levels. However, the Education Commission in its 1964-66 Report has recommended that the Council's administrative work and coordination of standards be delegated elsewhere and in effect the Council de-emphasized to a central coordinating committee within the Ministry of Education and Youth Services.

State Organization of Education

At the State level where the main responsibility for Indian education lies, typically a State Ministry of Education is the apex of the educational organization. Its functions generally include the supervising and inspecting of the primary and secondary schools in the State, the coordinating of the technical education within the State, and the advising of the State's governor, chief minister and legislature on educational matters. In larger states regional or district offices have been used to decentralize the supervising and inspecting functions. Local school boards administer the primary schools and most secondary schools. While the Union government does provide financial assistance for education, especially at the higher education level, the State governments must provide the bulk of the public funds. Generally the percentage of the State budget allocated for education of all types averages about 20%. By no means are the Union and the State governments the only source of educational funds. While typically more than 70% of those funds are from government funds, private support and fees often constitute over 20% of the expenditures on education in the States. Approximately 30% of the educational instittuions in India are non-governmental though the majority do receive government assistance; whereas only perhaps 20% of the primary schools are non-governmental in their management, over 60% of the secondary schools and over 70% of the colleges are privately managed.

The State universities are technically autonomous but must be established and largely maintained by the State legislatures. Additional control over the State university arises from the fact that the titular head is the chancellor who is usually the state governor; that the vice-chancellor, the chief executive of the university, generally is appointed by the chancellor; and that university governing bodies often are elected out of a political context.

I. CHART OF REPUBLIC OF INDIA EDUCATIONAL SYSTEM


Age
U.S.A.
School Year
School Year
25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4
Graduate and Professional
Undergraduate
Secondary School
Elementary
Kindergarten
4 3 2 1 4 3 2 1 12 11 10 9 8 7 6 5 4 3 2 1
20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
Ph.D.
M.A/M.Sc/ M.Com.
B.A./B.Sc/ B.Com.
P.U.C.
Secondary
Higher Primary
Lower Primary
M.A/M.Sc.
Pre-Degree
Higher Secondary
Inter-mediate
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10)

Legend: (1) Andhra Pradesh
(2) Assam and Nagaland
(3) Bihar, Gujarat and Maharastra
(Note: U/Bombay has 2 years Intermediate and 2 years First Degree)
(4) Jammu and Kashmir, Punjab, Rajasthan and West Bengal
(5) Kerala
(6) Madhra Pradesh
(7) Madras
(8) Mysore
(9) Orissa
(10) Uttar Pradesh

Certificates: 12 years – Pre-Professional; Pre-Engineering; First Year Arts, Science and Commerce; and Intermediate.
11 years – Higher Secondary School Certificate (H.S.S.C.); Pre-University (P.U.C.); Pre-Degree; and Indian School Certificate.
10 years – Secondary School Certificate (S.S.C.); Secondary School Leaving Certificate (S.S.L.C.); and High School Certificate (H.S.C.). Often referred to as Matriculation Certificate also.

Taxonomy of Indian Education

As the Chart of Republic of India Educational System and the Patterns of School and College Classes in Indian States (see Table 1) elsewhere in this chapter so clearly demonstrates, there is no single pattern of education in India (and indeed there is often some uncertainty about the prevailing pattern in a given State). However, a useful taxonomy might be this one:

Pre-Primary
Lower Primary: Classes I-IV
Higher Primary: Classes V-VII
Lower Secondary: Classes VIII-X
Higher Secondary: Classes XI-XII
First Degree: 3 years

By and large this classification system has been followed in selecting different types of schools, certificates, diplomas and other educational topics to be discussed in the chapters that follow.

TABLE 1. PATTERNS OF SCHOOL AND COLLEGE CLASSES IN INDIAN STATES

(1) Based on *Second All-India Educational Survey 1965*

(2) Based on *Education Commission Report 1964-66* and *Handbook on Universities: India and Ceylon 1969*

	Lower Primary	Higher Primary	Lower Secondary	Higher Secondary	Total Yrs. Primary through Higher Secondary	Years for First Degree	Gross Total of Years	Years beyond S.S.L.C. Level*
Andhra Pradesh								
(1)	I-V	VI-VIII	IX-X	XI-XII	12	3	15	4
(2)	I-IV	V-VIII	IX-XI	XII/P.U.C.** (1 year)	12	3	15	
Assam								
(1)	A, B, I-III	IV-VI	VII-X	XI	13	3	16	4
(2)	I-V	VI-VIII	IX-XII	XIII/P.U.C. (1 year)	13	3	16	
Bihar								
(1)	I-V	VI-VII	VIII-X	XI-XI Spl.	12	3	15	4
(2)	I-V	VI-VII	VIII-XI	XII/P.U.C. (1 year)	12	3	15	

*S.S.L.C. is generally equivalent to 10 years of U.S. education (see Chapter IX) and refers to the Secondary School Leaving Certificate or equivalent Class X certificate as explained in detail in Chapter V.

**P.U.C. refers to the Pre-University Certificate or equivalent Class XI Certificate as explained in detail in Chapter V.

A and B at the lower primary level are pre-primary classes.

TABLE 1—CONTINUED

	Lower Primary	Higher Primary	Lower Secondary	Higher Secondary	Total Yrs. Primary through Higher Secondary	Years for First Degree	Gross Total of Years	Years beyond S.S.L.C. Level*
Gujarat								
(1)	I-IV	V-VII	VIII-X	XI	11	3	14	4
(2)	I-VII	—	VIII-XI	P.U.C. (1 year)	12	3	15	
Jammu & Kashmir								
(1)	I-V	VI-VIII	IX-X	XI	11	3	14	4
(2)	I-V	VI-VIII	IX-X	XI/P.U.C. (1 year)	11	3	14	
Kerala								
(1)	I-IV	V-VII	VIII-X	XI	11	3	14	5
(2)	I-IV	V-VII	VIII-X	Pre-Degree (2 years)	12	3	15	
Madhya Pradesh								
(1)	I-V	VI-VIII	IX-X	XI	11	3	14	4
(2)	I-V	VI-VIII	IX-X	XI/P.U.C. (1 year)	11	3	14	
Madras								
(1)	I-V	VI-VIII	IX-X	XI	11	3	14	4
(2)	I-V	VI-VII	IX-XI	P.U.C. (1 year)	12	3	15	

TABLE 1—CONTINUED

	Lower Primary	Higher Primary	Lower Secondary	Higher Secondary	Total Yrs. Primary through Higher Secondary	Years for First Degree	Gross Total of Years	Years beyond S.S.L.C. Level*
Maharashtra								
—Western Region								
(1)	I-IV	V-VII	VIII-X	XI-Intermed.	13	2	15)	4
(2)	I-VII	—	VIII-XI	Intermed. (2 years)	13	2	15)	
—Vidarbha Region								
(1)	I-IV	V-VII or V-VIII	VIII or IX-X	— XI	11	3	14)	4
(2)	I-VII	—	VIII-XI	Pre-Degree (1 year)	12	3	15)	
—Marathwada Region								
(1)	I-V	VI-VIII	IX-X	XI-XII	12	3	15)	4
(2)	I-VII	—	VIII-XI	P.U.C. (1 year)	12	3	15)	
Mysore								
(1)	I-IV	V-VII	VIII-X	XI	11	3	14)	4
(2)	I-VII	—	VIII-X	XI/P.U.C. (1 year)	11	3	14)	
Nagaland								
(1)	A, B, I-II	III-VI	VII-X	P.U.C.	13	3	16)	4
(2)	I-IV	V-VIII	IX-XII	P.U.C. (1 year)	13	3	16)	

TABLE 1—CONTINUED

	Lower Primary	Higher Primary	Lower Secondary	Higher Secondary	Total Yrs. Primary through Higher Secondary	Years for First Degree	Gross Total of Years	Years beyond S.S.L.C. Level*
Orissa								
(1)	I-V	VI-VII	VIII-X	XI-XI Spl.	12	3	15)	4
(2)	I-V	VI-VII	VIII-IX	P.U.C. (1 year)	12	3	15)	
Punjab								
(1)	I-V	VI-VIII	IX-X	XI	11	3	14)	4
(2)	I-V	VI-VIII	IX-X	XI/P.U.C. (1 year)	11	3	14)	
Rajasthan								
(1)	I-V	VI-VIII	IX-X	XI	11	3	14)	4
(2)	I-IV	V-VII	VIII-X	XI/P.U.C. (1 year)	11	3	14)	
Uttar Pradesh								
(1)	I-V	VI-VIII	IX-X	XI-XII	12	2	14)	4
(2)	I-V	VI-VII	IX-X	Intermed. (2 years)	12	2	14)	
West Bengal								
(1)	I-V	VI-VIII	IX-X	XI	11	3	14)	4
(2)	I-V	VI-VIII	IX-X	XI/P.U.C. (1 year)	11	3	14)	

TABLE 1—CONTINUED

	Lower Primary	Higher Primary	Lower Secondary	Higher Secondary	Total Yrs. Primary through Higher Secondary	Years for First Degree	Gross Total of Years	Years beyond S.S.L.C. Level*
Andaman & Nicobar Islands								
(1)	I-V	VI-VIII	IX-X	XI	11	No Degree Programs		
(2)	I-V	VI-VIII	IX-X	XI	11	No Degree Programs		
Dadra & Nagar Haveli								
(1)	I-IV	V-VII	VIII-X	XI	11	No Degree Programs		
(2)	I-IV	V-VII	VIII-XI	—	11	No Degree Programs		
Delhi								
(1)	I-V	VI-VIII	IX-X	XI	11	3	14)	4
(2)	I-V	VI-VIII	IX-X	XI	11	3	14)	
Goa, Daman and Diu								
(1)	I-IV	V-VII	VIII-X	XI-Intermed.	13	2	15)	4
(2)	I-IV	V-VII	VIII-XI	Intermed. (2 years)	13	2	15)	
Himachal Pradesh								
(1)	I-V	VI-VIII	IX-X	XI	11	3	14)	4
(2)	I-V	VI-VIII	IX-X	XI/P.U.C. (1 year)	11	3	14)	
Laccadive, Minicoy & Amindivi Islands								
(1)	I-IV	V-VII	VIII-X	—	10	No Degree Programs		
(2)	I-IV	V-VII	VIII-X	—	10	No Degree Programs		

TABLE 1—CONTINUED

	Lower Primary	Higher Primary	Lower Secondary	Higher Secondary	Total Yrs. Primary through Higher Secondary	Years for First Degree	Gross Total of Years	Years beyond S.S.L.C. Level*
Manipur								
(1)	A, B, I-II	III-VI	VII-X	XI	13	3	16)	4
(2)	I-V	VI-VIII	IX-X	XI/P.U.C. (1 year)	11	3	14)	
NEFA								
(1)	A, B, I-III	IV-VI	VII-X	P.U.C.	13	3	16)	4
(2)	I-V	VI-VIII	IX-XII	XIII/P.U.C. (1 year)	13	3	16)	
Pondicherry								
(1)	I-V	VI-VIII	IX-X	XI/P.U.C.	12	3	15)	4
(2)	I-V	VI-VIII	IX-XI	P.U.C. (1 year)	12	3	15)	
Tripura								
(1)	I-V	VI-VIII	IX-X	XI	11	3	14)	4
(2)	I-V	VI-VIII	IX-X	XI/P.U.C. (1 year)	11	3	14)	

CHAPTER IV

Primary Education

OVERVIEW

Article 45 of the Constitution of India provides that the Union and the states shall endeavor to provide within a period of ten years from the commencement of that constitution for free and compulsory education for all children until they complete the age of fourteen years. That target date was January 26, 1960. Since education is primarily the responsibility of the states, the Union government's role in the development of primary education primarily has been the rendering of financial assistance.

As has been shown in Chapter III (and especially in Table 1) in the description of the overall educational pattern in India, the pattern of primary education varies widely in India. However, it tends somewhat to be an eight-year sequence divided into a lower primary of five years and a higher primary (or middle school as it is called sometimes) of three years. The first five years of education are free in virtually all states and territories but free education in the upper three years is available in less than two-thirds of the states. Enrollment in primary education in India has grown from about 19 million (43% of the age group) in lower primary and 3 million (13% of the age group) in higher primary in 1950-51 shortly after Independence to over 47 million (75% of the age group) and over 10 million (30% of the age group) respectively in 1965-66.

The number of actual instructional days varies from about 170 to 300 during the school year. Affecting the number of days available for classes are the 20 to 75 days for national and state holidays, the 40 to 60 days for school-related celebrations and the days used for examinations. The Education Commission in its 1964-66 Report recommended that the number of instructional days be increased to 234 (about 39 weeks) each school year which would run generally from mid-July until mid-May.

"Basic education" first proposed by Mahatma Gandhi in the 1930's and implemented after Independence in 1947 still is a unique characteristic of Indian primary education. Simply stated, basic education is founded on the concept that schooling should be based on the basic crafts of each community to meet the needs of the predominantly rural India.

Training in a basic craft is to be coupled with the teaching of traditional reading, writing, arithmetic and other subjects which are to be presented in a manner relating the material to that craft and the student's community and culture. Although the junior/senior basic school was to become the predominant scheme for primary education and although the number of such junior and senior basic schools has grown from 72,000 with nearly 3 million pupils in 1950-51 to approximately 140,000 with 5 million pupils in 1965-66, they account for less than 10% of the primary enrollment. Since 1963 the emphasis on handicrafts in the basic schools has been changed to agriculture.

In the traditional primary schools agriculture is to be a part of all general education in keeping with the Education Commission's recommendations in 1966. Otherwise, the primary schools vary greatly in their curricular offerings. Many rural schools can teach only basic reading, writing and arithmetic because of limited teacher and physical facilities. On the other hand, schools in the larger cities may offer science, social sciences and other subjects. The medium of instruction quite universally is the regional Indian language. Because of the scarcity of textbooks, teaching is mainly by the lecture method with heavy emphasis on rote memorization.

The Education Commission has proposed that the curriculum at lower primary stage consist of: one Indian language, mathematics, study of the environment, creative activities, work experience and social service, and health education. For the higher primary level they have recommended: two languages (the regional language and Hindi or English), a third language (on an optional basis), mathematics, science, social studies, art, work experience and social service, physical education, and education in moral and spiritual values.

While external examinations are not used in primary education for promotion to the next class or level, promotion is by no means automatic. In fact "stagnation" or grade repetition because of unsatisfactory performance is reported to be as high as 39% for the lower primary grades and 16% for higher primary grades in research studies. Such studies also show "wastage" or withdrawal from lower or higher primary education before completing that particular sequence of classes to be as high as 27% and 11% respectively. Ministry of Education statistics reveal that 63% of the pupils who were enrolled in Class I generally have ceased to attend school prior to reaching Class V, with a 40% attrition rate at the end of Class I alone.

According to the Second All-India Educational Survey, desirable qualifications for teachers at the lower primary level are matriculation (i.e., ten years of primary and secondary education) plus teacher training. That survey found only 33% of the lower primary teachers so qualified in 1965-66. At the higher primary or middle school level that Survey considered matriculation and teacher training as the minimum qualifications for teachers and found 64% with those minimums. However, it was learned that only 11% of the teachers possessed a degree with teacher training, the desirable qualifications according to the Survey.

PRE-PRIMARY EDUCATION

For the most part pre-primary schools or sections have been established to meet such social needs as day facilities for children of working mothers and children from urban families in crowded housing quarters. In 1965 there were about 3500 pre-primary schools with 6500 teachers and a total enrollment of approximately 250,000, largely supported by private agencies and fees. "Balwadis" established in the rural areas by the Union government to offer day nursery and pre-school facilities for smaller children as well as other services to expectant mothers, mothers, and children numbered about 20,000 in 1964 with a total enrollment of about 600,000.

LOWER PRIMARY EDUCATION

The schools at the lower primary stage (which includes the junior basic schools) may be separate units with just the four or five lower primary or they may be sections of schools that include higher primary and even secondary classes. In 1965 approximately 85% of the lower primary classes were in separate or independent units.

Over 450,000 primary schools or sections exist in India with 90% in the rural areas. They vary in average size from 90 in the rural areas to about 230 in the urban areas. The teacher:pupil ratio averages about 1:40 in the rural areas and about 1:35 in the urban areas but varies widely from state to state. In over 80% of the lower primary sections multiple-class teaching is necessary.

The enrollment at the lower primary exceeds 47 million, about 40% of which are girls. Of the estimated population in the age group of 6+ to 10+ it is estimated that about 75% are enrolled in lower primary education. Over 85% of the rural population is within a walking distance of one mile of a lower primary school or section, though about 20% of those facilities include Classes I-III only. At this level over 80% of the schools are under Union, state or local government management.

HIGHER PRIMARY

The higher primary or middle schools also may be separate units (about 16% are) or sections of schools with other stages of education. Over 60% are part of lower primary-higher primary facilities.

Of the over 96,000 higher primary schools or sections (which include the senior basic schools) in India, about 80% are in the rural areas. In average size they range from 84 in the rural areas to 212 in the urban area. The teacher:pupil ratio varies widely (but with an average of approximately 1:30) and multiple-class teaching is necessary in about 17% of the higher primary units.

The enrollment at this level totals over 10 million of which only 27% are girls. Approximately 30% of the estimated population in this age group 11+ to 13+ are enrolled in higher primary. Related to this low percentage undoubtedly is the fact that in rural India only about 46% of the population is within one mile of a higher primary school and about 18% is over three miles from such facilities. Quite in reverse contrast with the lower primary level is the role of private schools which enroll nearly 50% of the students in higher primary education

CHAPTER V

Secondary Education

OVERVIEW

As in the case of primary education, secondary education in India has a considerable variety of patterns as Table 1 in Chapter III dramatizes. However, it can be characterized somewhat as a three-to-four-year sequence that generally is considered as having two stages: lower secondary (often referred to simply as "secondary") and higher secondary. Secondary education is free in only a few states and territories and over 60% of the total enrollment is in "private aided" institutions. Enrollment in secondary education has expanded from about 1,200,000 (5% of the age group) in 1950-51 to over 8,400,000 (less than 15% of the age group) in 1965-66. Girls constitute about 23% of the enrollment at the secondary level.

Secondary schools or sections of schools in India total more than 26,000. Only a very small percentage are higher secondary schools or sections (not including the Pre-University which is comparable to the last year of the higher secondary but is a part of the university educational system in India). Of the some 26,000 secondary schools or sections, over 60% are in the rural and 40% in the urban areas. While over 70% of the Indian population are within five miles of a secondary school or section, only about 35% are within two miles of such a facility. The average size of a secondary school or section is over 230 students and ranges from about 170 to 330 students in the rural and urban areas respectively. A somewhat typical teacher-pupil ratio in the secondary schools is 1:20. Using the Second All India Education Survey's definition of desirable teacher qualifications—a degree and teacher training—61% of the secondary teachers in 1965-66 were so qualified. Of particular interest to many United States admissions officers may be the fact that, whereas the minimum qualification for science teachers is a Bachelor's degree in science for the high schools and a Master's degree for higher secondary and intermediate courses, 23% of those teachers in the Second All India Education Survey had only the matriculate or intermediate certificates and 15% had not studied science in their last academic work. Overall, 50% of the science teachers were considered untrained from the results of that Survey. At this point it should be added that more than 36% of the rural and 20% of the urban secondary schools or sections were found to have no science laboratories of any kind.

Reference has been made to "high school." What is a high school? In India this generally refers to the secondary school that is organized to offer Classes IX-X. The "technical high school" differs in that its emphasis is on technical training. The "post-basic school," continuing the type of education begun in the primary level junior and senior basic schools, came on the Indian scene in the 1960's but represents less than 10% of the enrollment at the secondary school level. The "higher secondary" and "multi-purpose" schools generally offer Classes IX-XI. These different types of secondary schools are described in more detail later in this chapter.

The medium of instruction at the secondary level certainly is of concern to many United States admissions officers. Over 90% of the rural secondary schools use only the prevailing regional Indian language. Even in the urban areas, more than 72% have the prevailing regional Indian language(s) as the medium of instruction.

The school year, as indicated earlier for the primary level, varies from about 170 to 310 actual instructional days. The number of national and state holidays, days for school celebrations and days for examinations account for this variation as at the primary level. The *Education Commission Report 1964-66* has recommended that the number of instructional days be increased substantially in the secondary schools as well as at the primary stage.

Failure percentages on the secondary school external examinations range, on all-India basis, between 40 and 60%. When this "stagnation" or failure rate is combined with the "wastage" or dropouts, the percentage of the secondary school population that completes the lower secondary program (and even more so for the higher secondary level) is very small.

External examinations enter the Indian educational picture at the secondary level. In these public comprehensive examinations the secondary school candidates "sit for examinations" that are generally set and controlled by the state ministry of education or board of education. Over a period of several days students write on a number of selected topics both in their field of specialization but also in other subjects, e.g., regional language(s), English and subject(s) related to their specialization.

Illustrative of the boards of education that conduct secondary level examinations is the Board of Secondary Education in the state of Andhra Pradesh. It sets and conducts these examination throughout that state: the Secondary School Leaving Certificate; the Higher Secondary Certificate; the Multipurpose and Higher Secondary School Leaving Certificate and the Higher Secondary (Multipurpose) School Certificate. Some boards deal with only one examination as does the Gujarat Secondary School Certificate Examination Board which conducts the Secondary School examination within the state of Gujarat. Others such as the Madhya Pradesh Board of Technical Education concentrate on the examinations for various secondary-level diploma programs in technological fields. Of interest to United States admission officers should be the fact that the certificates and related marks sheets for these external examinations at the secondary level generally are issued by the examination board rather than by the schools attended by the students.

LOWER SECONDARY EDUCATION

As indicated above, lower secondary or high schools predominate in the secondary education picture in India. Based on the Secondary Education Commission Report in 1953, the Union and the states decided to develop a national pattern of school classes covering eleven years: five years of lower primary, three years of higher primary and three years of secondary/higher secondary. However, for reasons that are discussed in Chapter VII, the higher secondary stage, independent of the university, has not materialized to any great extent.

The high school, the technical high school and the post-basic school are the schools that offer the lower secondary program varied curricula. English (in non-Hindi states), mathematics and the regional language are the subjects most likely offered in the high schools. Other subjects may include as compulsory subjects social studies, general science, a second Indian language, and a classical language. Depending largely on teachers and other facilities, electives may consist of advanced mathematics, chemistry, domestic science, drawing, handwriting, music, and technical, secretarial and agricultural courses. The Education Commission has proposed this curriculum for the lower secondary stages: three languages (the so-called "three-language formula" is described in Chapter VII); mathematics; science; history, geography and civics; art; work experience and social service; physical education; and education in moral and spiritual values.

The technical high schools (often referred to as junior technical schools) sometimes are attached to polytechnics that are otherwise post-lower secondary education in their offerings. Education and even housing in such schools may be virtually free to all or a large percentage of the students. Such technical high schools may have only one three-year curriculum leading to a Secondary Technical or Junior Technical School Certificate issued by a State Directorate of Technical Education generally after a total of eleven years of education. Others may offer not only the Junior Technical School Certificate program but also a more specialized Vocational High School Certificate course of study in such fields as leather work and tailoring. The Junior Diploma in Engineering is still another technical high school program of three years' length, after primary school. The Junior or Secondary Technical School Leaving Certificate generally represents a three-year course but after only seven years of primary school for a total of ten years, the same may be true for the Junior Technical School Certificate in some instances.

Craftsman training in the Industrial Training Institutes (ITI's) is difficult to categorize within the secondary scheme. In terms of educational qualifications required to enter, much of the training (i.e., completion of primary school) it might be classified as part of the lower secondary education but the certificate issued for that level of training would not be considered as equivalent to the High School or Technical High School certificate. Yet, many of the craftsman training courses in the ITI's in the Delhi Territory, for example, require the High School Certificate or its equivalent (i.e., Class X completion) for entry and hence might be considered post-lower secondary in that respect. For United States admission purposes these programs, because of their highly specialized and vocational nature, would not be appropriate preparation for other than advanced technical training in the same crafts. A brief description of the ITI's may still be in order however.

The "Craftsmen Training Scheme" came into being in its present organization in 1956. In the engineering trades there are full time courses of study of one to two years; in the non-engineering fields such as secretarial skills, printing and tailoring one year of full-time study is the general rule. The students are selected on a competitive basis and then receive free training, clothing and housing and may even receive a scholarship stipend. Subsequent to their training, the successful students may enter apprenticeship training in industry for three to four years on a stipend. The National Trade Certificate and the All-India examining for that certificate are under the jurisdiction of the National Council for Training in Vocational Trades.

Enrollment in vocational education at the lower secondary level has grown from about 46,000 (3% of the total enrollment at that level) in 1950-51 to approximately 137,000 (2% of the total lower secondary enrollment).

As discussed earlier in this chapter, the certificates for the lower secondary schools are issued by state boards of education based on external examinations conducted by them. Grading practices vary considerably. One Secondary School Certificate Examination grading system (that of the Maharashtra State Board of Secondary Education, Poona Divisional Board) is as follows:

Grade I: 60% of marks in the aggregate
Grade II: 45-59.9% of marks in the aggregate
Grade III: to all other successful candidates
Minimum for Pass in each subject: 35%
Minimum for Credit in each subject: 55%
Minimum for Distinction in each subject: 70%

(Generally 60% is the minimum for a Grade or Division I; 45% for a Grade or Division II; and 33 or 35% for a Grade or Division III.)

A few words about the use of the terms "Matriculation," "Matriculation Certificate" and "Matriculate." As the Willard *World Education Series* volume on India pointed out in 1964, the Matriculation Certificate representing the successful completion of ten years of education is seldom seen except in the case of older students because it is issued neither by the universities as it was in the past nor by any other institution or agency. However, these terms continue to be used in a generic way to refer to the completion of lower secondary school or Class X. Thus "Matriculation Certificate" often is used to mean the High School Certificate, Secondary School Leaving Certificate or equivalent Class X certificate.

HIGHER SECONDARY EDUCATION

The higher secondary school still is planned to be *the* apex of the secondary education system throughout. However, as has been indicated earlier, this plan has not been implemented to any great extent (about 25% as of 1966). As originally proposed by the Secondary Education Commission, the traditional Intermediate sequence of two years would be split: one year would be added to the ten-year primary and secondary stages and the other year added to the two-year first degree programs. In most Indian states, the Intermediate year has been discontinued and one year has been added to the first degrees to make them three-year courses. However, the other year has not been added to the secondary schools in most states; instead that year, generally designated as "Pre-University," has become a part of the offerings of the universities and their colleges even though it is not considered university-level work.

The *Education Commission* 1964-66 *Report* has proposed further that the Indian educational system be structured as follows: Lower Primary: Classes I-IV; Higher Primary: Classes V-VII; Lower Secondary: Classes VIII-X; Higher Secondary: Classes XI-XII; and First Degree: 3 years. However, the fact that the Secondary Education Commission's recommendation in 1953 for the eleven-year sequence has not yet become the prevailing pattern in the primary and secondary schools suggests that the addition of still another year to that primary-secondary sequence indeed will be many years in realization.

The higher secondary schools that have been formed may be categorized into two groups: the academic and the multi-purpose. The academic higher secondary school might be understood best from a brief description of visits to a government and to a public ("private" in United States terms) higher secondary school in the same Indian city. The Government Girls Model Higher Secondary School to be described really was a pair of institutions in that two schools with separate administration and teaching staffs were located in the same building but on separate shifts (as was the case next door in another school building where crowding was so critical that tents had to be used to accommodate all the students). This high school had Classes VI to XI with an estimated enrollment of 800-900 students and a faculty of 49 teachers. Classes VI to IX had four sections each with 25-40 students in each. In Class X there were six sections with 25-37 enrollment in each and in Class XI, five sections with a range of 21-34 students. The subjects offered to Class XI were: Mathematics, Biology, Physics, Chemistry, English, Hindi, Games, History, Music, Economics, Domestic Science, Library and Practicals (science laboratory sessions). In the sciences a typical pattern of class sessions was Physics in which 15-17 students had five lectures and two practicals (35 minutes each) weekly. The medium of instruction was Hindi except for the Mathematics and Sciences in Classes IX-XI which were in English. In the Higher Secondary School Certificate Examination 77% of that school's Class XI had passed in 1966-67; 72% in 1965-66 and 79% in 1964-65. On the Class VIII Examination used in this system to determine eligibility for promotion to Class IX, generally 80-85% had passed each year. Those who failed at either examination were placed in remedial sections of the failed subjects where 10-15 students spent extra periods each week. The regular school day for shift No. 1 at this school was 7:00 a.m. to 1:00 p.m., with 1:00 p.m. to 5:00 p.m. allocated for the other school. The remedial periods were held at 7:00 a.m. followed by prayer (really a non-denominational prayer and song session) at 7:30 a.m. Regular classes began at 8:00 a.m. six days per week. The teachers' six-day week included thirty-six teaching periods and their starting salary was 275 rupees ($36.67) per month. The principal was a full-time administrator with a total monthly income of 600 rupees ($80.00).

The other visit to be described was to a well-regarded public school. Located on a well-kept fourteen acre tract with a good physical plant (including science facilities), this school had 3000 students and 140 teachers in Classes I to XI. About 40% of the students were female and many of the boys were sons of government employees. Established in the 1940's with Rotarian assistance, the school is completely self-supporting from monthly fees which include a tuition fee of 55 rupees ($7.36). Only 2% of the students held scholarships. While most of the Class XI students took the Indian School Certificate Examination (comparable to the Senior Cambridge) the previous year, the headmaster felt there was a decided trend to the Higher Secondary School Certificate Examination. This trend he believed to be due to the greater depth in science and Hindi in the syllabus for the latter certificate and to the growing reputability of that certificate. The previous year, 108 Class XI students sat for the Indian School Certificate Examination and 100 passed. On the Higher Secondary School Certificate Examination all 41 that sat for it had passed. The courses of study (in English) offered in the Classes IX-XI were those covered in those two examinations.

The syllabus or scheme for one Higher Secondary Examination is as follows:

Science Group:
  English and Hindi—compulsory
  Chemistry, Physics, Mathematics, Geometry, Drawing and Biology—any three
  Core (General Education) Subjects: Craft, Social Studies Paper I & II, Indian Civilization and Sanskrit
Humanities Group:
  English and Hindi—compulsory
  History, Geography and Economics—at least two; and Art, Home Science and Domestic Science—at least one. Four subjects must be chosen

The Indian School Certificate Examination is structured much as follows:

Science Group:
  English Language—Literature and Hindi—compulsory
  Chemistry, Physics, Mathematics/Additional Mathematics, Technical Drawing and Biology—any three
  Art—optional
  Core (General Education) Subjects: Craft, Social Studies and Sanskrit
Humanities Group:
  English Language—Literature and Hindi—compulsory
  History, Geography, Home Science, House Craft and Art—any three
  Core (General Education) Subjects: Craft, Sanskrit, Lower Mathematics and General Science

For the Indian School Certificate a candidate must pass in a minimum of five subjects including the two compulsory subjects. He may sit for a maximum of six subjects.

The other type of higher secondary school is the multipurpose one.

This type of school was to be the response to the criticism of the Secondary Education Commission in 1953 and other authorities that secondary education was too academic, isolated from life and contrary to the improvement of their practical and vocational efficiency. More specifically the aim in the multipurpose schools at the secondary level was to provide education with a vocational bias but not vocational education. The curriculum for such schools generally includes the same subjects as the academic higher secondary school (since so many of their students aspire to a university education) and no more than three courses of study (such as agriculture and fine arts). Dr. Margaret Cormack from her years of experience in India has written in her excellent book on the Indian students and social change, *She Who Rides a Peacock*:

> Multipurpose schools theoretically offer instruction in language, social studies, general science, a compulsory craft and courses in science, technology, commerce, agriculture, fine arts, home economics or the humanities. Actually many schools assuming the title scarcely deserve it . . . Secondary education, except for a few progressive and somewhat experimental schools . . . generally [is] traditional in contents and methods . . . Learning is "passive"; most work is memorized for the government examinations . . . The need for "practical education" is great, but the prestige of academic knowledge still remains—and is likely to continue unless and until Indian society uses and handsomely rewards those technically trained.

By 1960-61 only 2000 multipurpose schools had been established (less than 10% of the secondary facilities in India then) and relatively few have been added since. While most of the students from these schools who apply for study in the United States are likely to present a Higher Secondary School Certificate, a few may have the Higher Secondary Multipurpose Certificate especially from Andhra Pradesh and Gujarat states.

The *Education Commission Report* 1964-66 has proposed the curriculum for the higher secondary sequence of Classes XI when it has been reconstituted: any two languages; any three subjects from the following—an additional language; history; geography; economics; logic; phychology; sociology; art; physics; chemistry; mathematics; biology; geology; and home science—work experience and social service; physical education; art or craft; and education in moral and spiritual values. This proposal is the result of that Commission's stand that the philosophy of basic education first advocated by Mahatma Gandhi is still a sound one even though the multipurpose school approach has not been widely accepted or adopted.

Technical and vocational education at the higher secondary level (Classes XI-XII)nevertheless did have 564,000 students enrolled in 1965-66 which was over 40% of the total enrollment at that level (about the same percentage as in 1950-51). This includes the large enrollment in the nearly 300 polytechnics and rural institutes established to provide technician training usually after the Class X level. Most of these institutions are controlled and financed by the state governments. The courses of study are designed to produce foreman, skilled technicians and supervisors of technical processes but not to train "graduate engineers." Some of the courses of study are: Licentiate or Diploma in Engineering (Civil; Mechanical; Electrical; Mining; Automobile; Telecommunications; Metallurgy; Civil and Rural; and Radios); Diploma in Ceramics (Ceramics Technology; Potteries and Refractories; and Glass and Enamel); Diploma in Fisheries; Diploma in Technology and Navigation; Diploma in Commercial Practice; Certificate in Architectural Draftsmanship and Assistantship; Diploma in Textile Technology; Diploma in Medical Technology; Diploma in Costume Design and Dress Making; Diploma in Leather Technology; and Diploma in Letterpress Group. While the engineering programs generally require three years of full-time study (with perhaps an additional year of practical training), some are two full-time years in duration (and may have even four years of part-time study). Other courses of study vary from one to three years. Although the typical admission requirement is the Class X level of certificate (e.g., High School or Secondary School Leaving Certificate), some of the programs require the Higher Secondary School Certificate or its equivalent. Though the polytechnic courses usually are offered in separate institutions, a relatively few are part of Indian universities but such courses are not considered to be at the university level. The polytechnics, technical schools and rural institutes have been listed in Appendix G.

The diploma, licentiate (or "licenciate" as it is often spelled) or certificate for such a polytechnic or rural institute generally is issued by a state board or department of technical education (or by the National

Council for Rural Higher Education in the case of the rural institute's courses).

A somewhat unique practice in Indian engineering education has posed an admission problem for a number of United States admissions officers. That practice is the recognition by the Government of India and the several Indian states of the polytechnic diploma under certain conditions as the equivalent of the engineering degree for employment purposes. Understandably many applicants whose education has been so recognized have sought such recognition by United States universities for admission to graduate study in engineering. In India an engineering diploma holder may apply for "Admission to Associate Membership" in the Institution of Engineers (India), an organization founded in 1920 and incorporated by a Royal Charter in 1935 "for the general advancement of engineering science." By passing Sections A and B of the Associate Membership Examination and meeting the required four years of professional engineering experience in a responsible position, he becomes an Associate Member-Institution of Engineers (India), referred to as A.M.I.E. It is this status that is recognized as the equivalent of an engineering degree by the Union government and the Indian states. However, it is highly unusual for such a person to gain admission to a graduate (called post-graduate in India) program in an engineering college or faculty.

The Intermediate ("Inter") College has become virtually extinct in India except in the state of Uttar Pradesh (where the one remaining Board of Education for Intermediate Examinations is located). In fact, the Intermediate Arts and the Intermediate Science Examination and Certificate are prevalent only in one other area in India: that within the jurisdiction of the University of Bombay (i.e., Greater Bombay or Western Maharashtra and the Union territory of Goa). There the University of Bombay is the examining authority and issues the Intermediate Certificates. The question arises as to the secondary or higher education status of such a certificate. One index might be the treatment accorded such a certificate by Indian universities. Calcutta University, for example, in its admission requirements for the first degrees, equates the Intermediate Certificate with the Higher Secondary School and Pre-University Certificates and allows no credit for any of those certificates toward the Bachelor degree requirements. The two-year Intermediate program generally has an examination at the end of each year with marks sheets for each examination and a certificate is issued at the successful completion of the two years.

Equivalent to the Intermediate Certificate and the Higher Secondary School Certificate is the Pre-University or Preparatory. Referred to in brief earlier, this one-year course of study is widespread in India. Though secondary in nature and status, it is located in the colleges of the universities and generally requires the High School Certificate or equivalent certificate representing ten years of primary and secondary education. The Pre-Degree program is quite the same as the Pre-University one in subjects, level and duration (except in Kerala where it is a two-year program and is sometimes misleadingly referred to as a "junior college" course of study but is comparable to the Intermediate in its admission requirements, subjects and duration).

Illustrative of the subjects on the Pre-University Examination are those on Calcutta University's examination. The compulsory subjects are English and Bengali (or one of a specified list of other languages). In the elective class the student may choose to be examined in any three of the following: (1) a classical or European language; an advanced course in one of several Indian languages; or English; (2) History; (3) Logic; (4) Mathematics; (5) Elements of Economics and Civics; (6) Commercial Geography; (7) Commercial Arithmetic and Elements of Bookkeeping; (8) Music; (9) Household Art (for girls only); (10) Child Care and Training (for girls only); (11) Social Science (for girls only); (12) Geography; (13) Botany; (14) Anthropology; (15) Psychology; (16) Household Science (for girls only); (17) Military Studies (for National Cadet Corps members only). The grading system for the Calcutta University Pre-University Examination is: Division I—60% of possible marks and higher; Division II—45% to 59.9%; and Division III—33% to 44.9%. (While the Division I standard is fairly common throughout India, the minimums may be 50% for Division II and 35% for Division III. The minimum for a pass on any given paper in the examination may be as low as 30% of possible marks.)

Appendix H—Indian University Examination Results include data on the number that sat for Pre-University and Intermediate Examinations in 1964 and 1965 and the percentages that passed those same examinations. Table 2 illustrates the awards of Divisions I, II, III and Failed in one Higher Secondary Examination system.

TABLE 2: AWARDS OF DIVISIONS I, II, III AND FAILED
IN DELHI HIGHER SECONDARY EXAMINATIONS—1968

School Management	**Division I**	**Division II**	**Division III**	**Failed**
Delhi Corporation	1.1%	20.6%	30.6%	47.7%
S.D.	1.9%	26.4%	38.0%	33.7%
Khalsa	2.4%	32.4%	33.9%	31.3%
DAV and Arya	4.3%	33.2%	30.4%	32.1%
Government	4.8%	33.7%	31.2%	30.3%
Jain	6.9%	40.3%	28.7%	24.1%
Ramjas	13.8%	42.2%	27.1%	16.9%
Christian	15.2%	44.7%	19.0%	21.1%
Provincial	21.1%	44.2%	16.2%	18.5%
Other	8.0%	38.8%	26.6%	26.6%

Source: **National Herald,** August 10, 1968

UNITED STATES-TYPE SECONDARY SCHOOLS

Three American-type schools in India are: the American International School, New Delhi; Woodstock School, Mussoorie, Uttar Pradesh State; and Kodaikanal School, Kodaikanal, Madras State. The American International School's academic standards can be compared favorably with very good schools in the United States. Located in new and completely modern buildings (comparable to the campus setting of many suburban United States schools) in the Diplomatic Enclave in the capital, the school offers instruction at grade levels one through twelve. Its enrollment of over 600 pupils is about 80% American and 20% Indian and other nationalities.

Woodstock School located in Mussoorie north of the capital, is a coeducational boarding school that has been accredited by the Middle States Association of Colleges and Secondary Schools. Grades one through twelve are available and admission is on a competitive basis. Kodaikanal School, in South India, also is a coeducational boarding school and, like Woodstock, can be compared with a college-preparatory boarding school in the United States.

CHAPTER VI

Higher Education

A. INTRODUCTION

> Higher education in India is less purposeful innovation than casual change, less spirited initiative than hastily assembled new departures, less far sighted planning than uneven movement. Irregular and unpremeditated as this movement may be, it is pushed forward by two clear, self-consistent antagonistic impulses, two persuasions each sure of itself but in tension with the other. One is the drive to democratise, to expand, to admit greater numbers; the other is the drive to professionalize, to raise the standards, to increase equipment and research in special fields. The politically strongest demand put to education is that it be extended to new numbers who have not had the privilege before . . .

So writes Dr. Robert L. Gaudino in his book, *The Indian University.* The record certainly supports the contention that there has been a drive "to expand, to admit greater numbers." As has been indicated in Chapter III, higher education in India since 1950 has had tremendous growth in quantity: from 27 universities to 80; from 542 colleges to nearly 3000; from 300,000 university enrollment to over 2,400,000. In this chapter higher education is examined mainly from the perspective of an American admissions officer. The main focus in this chapter is on the "higher education" provided in the institutions categorized by the Ministry of Education, Government of India as "institutions for higher education" in its biennial publication, *Directory of Institutions for Higher Education.* The reader is referred to Chapter III and the Chart of the Republic of India Educational System and Table I—Patterns of School and College Classes in the Indian States for an overview of the educational system including higher education.

For further perspective a few enrollment statistics for Indian higher education should be cited at this point. In its *Report for the Year* 1968-69 the University Grants Commission reports these enrollments:

Pre-University Stage	517,021	20.9%
Intermediate Stage	375,558	15.2%
Pre-Professional Stage	14,582	0.6%

Graduate Stage [First Degrees]	1,388,335	56.1%
Post-Graduate Stage	135,459	5.5%
Research Stage	12,145	0.5%
Diploma/Certificate Stage	30,164	1.2%
Total	2,473,264	

This represented a growth of 254,292 students in 1 year or 11.5%. In just two years (1966-1968) the enrollment in higher education increased 524,252 or nearly 27%.

DIPLOMA AND CERTIFICATE COURSES

The Directory of Institutions for Higher Education published by the Ministry of Education, Government of India lists "institutions with non-affiliated courses." These are courses considered by that ministry to be part of India's higher education but not controlled by the universities (though sometimes offered in institutions otherwise affiliated with universities). Appendix F is based on that listing. From that appendix it will be seen that diplomas and certificates are available in seventeen fields of study. These courses have in common the fact that they are post-matriculation courses (that is, beyond the secondary school) and are at least two years in duration.

Chapter V—Secondary Education—explains the diploma programs of the polytechnics and the rural institutes. Later in this chapter the diplomas and certificates in teacher education are discussed as are the diplomas and certificates in medicine and public health in related sections. With some risk of over-generalization the other diplomas and certificates perhaps can be described as specialized courses of study that for United States admission purposes are not likely to represent appropriate preparation except for advanced technical or vocational training in the same field.

Certain courses of study offered in universities are programs that might be described as bridges between the secondary level on the one hand and the first-degree level on the other. The one-year courses such as the Pre-University, the Preparatory and the Pre-Degree represent *eleven* years of formal education and are considered as the equivalent of the Higher Secondary School Certificate for admission to Indian institutions. The two-year Pre-Degree in Kerala State, the Pre-Professional (e.g. Pre-Medical and Pre-Agriculture), the Preliminary and the

Intermediate (Arts, Science and Commerce) mean the completion of *twelve* years of schooling. Because these eleven- and twelve-year programs are not only in United States terms but also increasingly in Indian terms are secondary in nature, they have been discussed in Chapter V. Secondary Education Equivalency with United States education is shown in Chapter IX—Admission and Placement Recommendations.

The so-called oriental diplomas and certificates have been described in the next section of this chapter.

B. UNIVERSITY EDUCATION

1. General

Universities must be established by the Constitution, by an act of the Union Parliament or by an act of a State legislature. Appendix A lists the eighty universities established as of August 1970. Of the seventeen Indian states only Nagaland does not have at least one university. The dates of establishment of the universities and their 1968-69 enrollment are shown in Appendix B.

The three universities created by the Constitution are Aligarh Muslim, Banaras Hindu and Delhi (though all these institutions existed before Independence). Visva Bharati and Jawaharlal Nehru University are the two universities established by act of Parliament. Often referred to as the Central universities, they receive their support exclusively from the Union government. The remaining seventy-five universities have been the creation of the State legislatures. Seventeen of these have been set up since 1965 and half of India's universities today did not exist in 1959. In size, they range from Calcutta with its enrollment of nearly 200,000 students to the new ones with less than 2000 enrollment. In 1968-69 university enrollment was about 2,500,000. Over 36% of this total was in the Pre-University, Intermediate, and Pre-Professional courses of study. An indication of the persistency of the Intermediate programs is the fact that they comprised 375,000 or 15% of the university enrollment that year. The first-degree courses had nearly 1,400,000 students or about 56% of the total. Post-graduate and research degree study accounted for 6% and only about 1% (some 30,000 students) were pursuing diplomas and certificates.

2. Affiliating Universities

The majority of the universities are *affiliating* in nature. The relationship of the affiliated college to the parent university is not uniform. In all cases the university prescribes the syllabus or curriculum for each course of study, sets and supervises the external examination and awards the degrees. However, the control maintained over the colleges in terms of minimum standards for initial affiliation and in the maintenance of teaching standards has been criticized widely, especially in the University Grants Commission's 1965 *Report on Standards of University Education*. Chapter VII focuses on this problem of standards and related ones as it discusses major issues and trend in India and its educational system. The affiliated colleges contain over 80% of the university enrollment and number over 2600. Appendix C names those affiliated colleges and indicates whether the affiliation applies to all degree programs, at what degree level instruction is provided and whether the affiliation is temporary or not. Where a college's affiliation is shown as temporary, this often is a sign of a sub-standard institution according to the above-cited report.

Some colleges within Indian universities tend to be under more direct control of the university and even may be on the main campus; these often are called *university, constituent* and/or *associated colleges.* However, the University Grants Commission tends to avoid this distinction in its classification and treatment of Indian colleges (perhaps because of the lack of any uniform and consistent set of standards for such a distinction). In its January 1, 1970 *List of Colleges Under Section* 2(*E*) *of the U. G. C. Act* that commission uses these categories: (1) *degree colleges* and *post-graduate colleges* and (2) *non-government colleges* and *government colleges.*

That January 1970 *List* shows 2622 colleges affiliated with 64 universities and 1 institution "deemed to be a university." Incidentally, the universities without colleges are: Aligarh Muslim,; Annamalai; Kalyani; Rabindra Bharati; Roorkee; and Visve Bharati; these tend to be purely *unitary* in nature: that is, primarily teaching and residential and centered on one campus. In the 65 institutions with affiliated colleges those colleges are distributed as follows:

Degree Colleges	2019
Post-Graduate Colleges	603
Non-Government Colleges	2017
Government Colleges	605

Permanent Affiliation	1525
Temporary Affiliation	1097

Calcutta University has the largest number of colleges (190). Others with large numbers are Punjab (170), Madras (108), Gujarat (102), Rajasthan (94) and Karnatak (88). On the average the 65 universities have 42 colleges each but several have fewer than five. One motivation for the establishment of the many new Indian universities has been to reduce the large number of colleges affiliated with certain universities. For example, Kerala University's total of 140 colleges in 1965-66 was reduced to 74 by 1969-70 through the start of such new institutions as Calicut (in 1968).

All affiliating universities in addition to their colleges have teaching and research departments. Typically the instruction for the master's and doctoral degrees, especially in the sciences, is conducted in those departments; and even B. Sc. (Honours) work may be restricted to those departments. However, many colleges (especially older, well established ones) do offer master's level instruction.

In the section of this chapter entitled "One Indian University" a more detailed description of the various aspects of one major Indian university has been provided that may give the reader a better understanding of the Indian university as an entity.

3. Institutions Deemed to be Universities

Although quite specialized and therefore not as broad-gauged as the traditional university, nine institutions have been designated as "Institutions Deemed to be Universities." These have been identified in Appendix A. The Birla Institute of Technology and Science, the Indian Institute of Science and the Indian School of Mines are discussed later in this chapter in the section on "Engineering Education." The Indian Agricultural Research Institute is described in the section on "Agricultural and Rural Education." The *Gujarat Vidyapith* concentrates on education and related activities based on the philosophy of Mahatma Gandhi. Its degrees include the Samajvidya (Bachelor of Social Sciences); the Parangat (Master of Arts); the Hindi Shiksha Visharad (Bachelor of Education-Hindi); the Shikshan Visharad (Bachelor of Education); the Shikshan Parangat (Master of Education); and the Diploma Hindi Shiksha Vinit (Undergraduate Diploma in Hindi).

The *Gurukula Kangri Vishwavidyalaya* has specialized in Indian culture since 1900. Its courses of study are the Vidyadhikari (Matriculation or Secondary School Certificate); the Vidyavinod (Intermediate); the Vedalankar and the Vidyalankar (Bachelor of Arts degrees) and Master of Arts. The *Indian School of International Studies* was founded in 1955 for advanced instruction and research in international relations and area studies. It awards only the Ph. D. degree but in at least twelve fields of specialization. The *Jamia Millia Islamia* arose out of an effort by the Muslim community in the 1920's to develop a national education. On its campus in New Delhi it has an integrated system of education from pre-primary through the master's degree. Courses of study include the Jamia Preparatory (a one-year pre-university course); B.A. and B. Sc. (3 year degree beyond the Higher Secondary); B. Ed.; M. A. and M. Ed. The *Kashi Vidyapith* resembles the Gujarat Vidyapith in that both really have based their educational programs on Gandhian philosophy. Located in the holy city of Banaras (or Varanasi as it is called generally today in official circles), the Kashi Vidyapith was established in 1921 and offers these courses of study: The Shastri (Bachelor of Arts); the Master of Applied Sociology; and the Master of Arts (in five fields). The high school and intermediate certificates programs were scheduled to be discontinued in 1969. The *Tata Institute of Social Sciences* has a history that goes back to 1936 when the Sir Dorabji Tata Graduate School of Social Work was founded in Bombay. Its purpose has been to train professional personnel in social services, social work and related fields and to conduct related research. Its courses of study are: the M.A. degrees in Social Work and in Personnel Management and Labour Welfare (both 2-year degrees after a bachelor's), the Certificate in Social Research (a one-year program after the bachelor's) and Ph. D. degrees in Social Work and Social Science (with a minimum of two years of research).

4. Institutions Declared to be of National Importance

"Institutions Declared to be of National Importance" now total ten and are listed in Appendix A. With this designation has come the power to grant degrees. The two medical institutions are described later in the Health Education section of this chapter and the five Institutes of Technology, in the Engineering Education section. *The Indian Statistical Institute* in Calcutta was established in 1928 as a Statistical Laboratory by a group of volunteers under a Professor of Physics in Presidency College of Calcutta University. In 1932 it became the Indian Statistical Institute and in 1959 received its present official status. Initially it was a scientific society and a laboratory for analytical studies; then its involvement moved more toward economic studies such as crop estimation surveys. Today the Indian Statistical Institute still serves as a learned society but also has become a research center (including responsibility for the National Sample Survey) and an International Statistical Education Center. Its degree programs are: B. Statistics (4 years); M. Statistics (2 years); a post-graduate diploma and several post-master's courses in statistics-related fields. Through its Statistical Quality Control units in some ten cities students may pursue the Statistician's Diploma and the M. Statistics degree courses of study. Competitive examinations are conducted by this Institute for its own admissions and those of the Indian Institutes of Management throughout India; the Institute's electronic computer facilities (comparable to most United States university capabilities) are used in the analysis of test results.

5. Research Institutions

A number of research institutions in both the scientific and the humanistic spheres may be of considerable interest to the United States admissions officer. For they serve as the sites of research for many Indian students pursuing advanced degrees even though many of these research institutions are not affiliated with the Indian universities that award those degrees. For example, the *Physical Research Laboratory* in Ahmedabad, Gujarat State is not affiliated with any university but research towards the M. Sc. in Physics and the Ph. D. for at least five universities (Agra, Baroda, Gujarat, Kerala and Karnatak) is conducted at that laboratory. Appendix E lists a number of such research institutions. Other well-regarded research institutions include the *Atomic Energy Laboratories* in Bombay and Trombay, Maharastra State, the *Tata Institute of Fundamental Research* (Biological and Physical Sciences) also in Bombay, the *Sata Institute of Nuclear Physics* in Calcutta, the *Institute of Mathematics Research* in Madras and the *Raman Research Institute of Physics* in Bangalore, Mysore State.

At this point it might be well to refer to the extent of basic research outside the universities in India. The *Education Commission Report*

1964-66 expressed considerable concern about the number of institutions devoting almost their entire effort on university-type of research but functioning outside of the university system, thereby separating fundamental research and teaching. Because of their new facilities, better salaries and research opportunities these institutions indeed have been powerful competitors of the universities for senior teaching and research personnel.

The Council of Scientific and Industrial Research (mentioned earlier in Chapter III) has been the sponsor and management for thirty of the newer national and regional research institutes and laboratories including the *Central Drug Research Institute,* the *Central Electro-Chemical Institute,* the *Central Mechanical Engineering Research Institute,* the *National Institute of Oceanography* and the *National Chemical, Metallurgical and Physical Laboratories.* Others have been managed and well supported by Union Government Ministries. e.g., Agriculture, Defence, Education, and Health and Family Planning). In its *Directory of Scientific Research Institutions in India* 1969 the Indian Scientific Documentation Centre in Delhi describes 900 scientific institutions engaged in research and development activities; the overwhelming majority of the institutions are not academic (i.e., universities or their equivalent).

6. Centers of Advanced Study

To strengthen post-graduate teaching and research and to channel limited resources effectively for that purpose, the University Grants Commission has selected a limited number of university departments to develop advanced training and research in certain fields. "The pursuit of excellence" and "the accelerated realization of international standards" are stated aims. Promising university departments have been selected on the basis of the quality and quantity of training and research to date, their reputation and contribution to research and their potential for further development. Through grants from the U. G. C. these Centers of Advanced Study are able to attract additional key faculty and research staff and promising M. A., M. Sc. and Ph. D. candidates and to secure equipment and other facilities. The Education Commission in its 1964-66 Report has urged the establishment of some fifty Centers and the inclusion of agriculture, engineering, medicine and modern Indian languages in the array of disciplines represented in the system of centers. Appendix D lists the universities and the departments designated as Centers of Advanced Study with the selected fields of study and research.

7. First Degrees

"First Degree" is the term commonly used to refer generically to the degree earned after secondary or higher secondary education. The most common first degrees are the Bachelor of Arts, Science, and Commerce degrees. With the exception of Bombay and Lucknow Universities where the two-year degree still persists (though total schooling generally is the same), these three degrees are three years in duration and increasingly require an annual examination. The minimum admission requirement is a pass in the Higher Secondary School, Pre-University or equivalent examination (Class XI), and the minimum age of 15. However the B.A. (Pass), the B. A. (General), the B. Sc. (General) and the B. Com. (Pass) may be considerably less competitive in admission than the B.A. (Hons.), the B. A. (Special), the B. Sc. (Hons.) and the B. Com (Hons.), respectively, in terms of either the subject preparation and/or the "percent marks in the aggregate" (that is, the overall percentage of maximum possible marks) on the Higher Secondary School, Pre-University or equivalent examination. On the other hand, these two categories of first degrees may differ instead after admission in that more "papers" (that is, subjects upon which students are examined in the external examinations) or a greater concentration in one subject may be required for the Special or Honours degrees than for the Pass or General degrees. Unlike the past, these so-called "honours" first degrees are not longer in terms of years than the other category. There are but two exceptions: (1) Lucknow University B. A. (Hons.) and B. Sc. (Hons.) programs of three years' duration beyond the Intermediate whereas its B. A. (Pass) and B. Sc. (Pass) are two years beyond the Intermediate and (2) Punjab University's B. Sc. (Honours School) course of three years' length beyond the B. Sc. Part I of the B. Sc. (General) degree program. However, another important distinction is that that honours degree courses typically will have better faculty and smaller classes. Appendix J—Syllabi, Examination Schemes and Teaching Schedules—contains a sample of a Bachelor of Arts Examination Scheme and Syllabus.

It might be stressed that on a first degree examination certain subjects may be *compulsory*: for example, English and general education. Depending on the student's *principal* or *main* subject (that is, his major), he generally has a related *subsidiary* or *auxiliary* subject or subjects (that is, his minor or minors). The latter may include a compulsory subsidiary and an elective one. To illustrate, a student seeking a *B. Sc.* (*Honours*) degree might choose Chemistry as his principal or main subject and then have Physics and Mathematics as elective subsidiary subjects and English and the History of Science and Scientific Method as compulsory subsidiary subjects (required perhaps of all science students). Illustrative of the difference in arrangement for the *B. Sc.* (*General*) might be the following: the student generally does not concentrate on one science but has a cluster of science subjects such as Physics, Chemistry and Mathematics with equal emphasis in his external examinations and then may have English required but a choice between the History of Science and Scientific Method and a Modern Indian Language. The principal or main subject generally is studied during each year of the degree course and examined in each external and internal examination.

Other first degrees include the Bachelor of Physical Education and the Bachelor of Music which also are three-year degrees after the Higher Secondary or Pre-University Certificates. The first degrees of Bachelor of Science (Agriculture), Bachelor of Science, (Agriculture Engineering), Bachelor of Science (Home Economics), Bachelor of Science in Nursing, Bachelor of Pharmacy, and Bachelor of Veterinary Medicine (also after the Higher Secondary or Pre-University Certificates) are generally four years in length. The Bachelor of Dental Surgery also may be a four-year degree but with either the Pre-Professional or Preliminary course (twelve years of schooling) as preparation or a five-year program after the Pre-University—in either case, a 16-year program. The Bachelor of Medicine and Bachelor of Surgery (M.B.B.S.), the first degree in medicine, as a rule is 4½ to 5 years after the Pre-Professional or Preliminary or a total of 16½ to 17 years of total schooling. The five-year engineering and technology degrees are described in the Engineering Education section of this chapter.

8. Professional Degree

Professional degrees requiring a first degree as a minimum requirement for admission include the Bachelor of Education or Teaching (discussed in the Teacher Education section of this chapter) and the Bachelor of Library Science—one-year degrees and the Bachelor of Law—two years in length. At this level are the Post-Graduate Diplomas in such fields as Home Science, Languages, Librarianship and Social Work. While these particular ones tend to be one-year in length after the first degree, some may be two-year diplomas. The Post-Graduate Diplomas in Business Administration, Business Management and Industrial Management generally are two-year diplomas; the "Business Administration and Management Education" section of this chapter discusses these further.

9. Master's Degree

The Indian master's degree in the arts, science and commerce as a rule is a two-year degree after the first degree in those fields and thus represent 16 years of education from Class I. While there is a tendency to require at least a Division II first degree for admission to study for the Indian M. A. and M. Sc., a pass or Division III often is sufficient. Also a student may not be required to have written a paper (that is, to have been examined) in the proposed field of study while an undergraduate as the UGC Review Committee on Sociology criticized in 1967. Appendix J contains Master of Arts/Master of Science Teaching Schedules that outline the subjects for the different courses of study and the amount of lecture and practical work required in each subject during each year of study at one major Indian university. An external examination at the end of each year is common and often referred to as *Previous* (*or Part I*) and *Final* (*or Part II*) respectively. The master's examinations typically include a total of eight papers and sometimes may be divided among two subjects by the student. Research and thesis often may, however, take the place of the second year examination. The M. Ed. degree discussed in the Teacher Education section of this chapter tends to be a one-year degree but follows both a first degree (such as a B. A.) and a B. Ed. degree so that the total years of education at the end of a M. Ed. typically is 16 years or the same as the total for the M. A., M. Sc. and M. Com. On the other hand, the M. Sc. (Engg.) or its equivalent in engineering and technology (see the Engineering Education section in this chapter) is a two-year degree though it follows the longer B. Sc. (Engg.) degree and hence represents some 18 years of schooling.

10. Doctoral Degrees

Doctoral degrees are research degrees that have the master's degree as an admission requirement but do not involve course work. At least two years of research beyond the master's, the submission of a thesis and its defense (viva voce), are the basic requirements for a Ph. D. While the D. Litt. and D. Sc. degrees may be honorary ones, the earned D. Litt., D. Sc. as well as the D. C. L. (Doctor of Civil Law) and the LL. D. (Doctor of Laws) represent the highest Indian degrees. While the Ph. D. generally is a prerequisite for the D. Litt. and D. Sc., some Indian universities award them for "published work of merit" three years after a master's or six or more years after a bachelor's. A common practice is to submit the doctoral research to the scrutiny not only of two Indian authorities (perhaps one within and without the Indian university to award the degree) but also to one foreign authority.

11. Oriental Degrees and Titles

Oriental degrees and titles awarded by some Indian institutions may be confusing to the United States admissions officer though he is not likely to encounter many among his Indian applicants. More common titles are the Shastri and the Acharya, considered in India to be comparable to the Bachelor of Arts and Master of Arts respectively. Because the study tends to be in oriental languages or in Indian medicine, music or theology, the determination of relevancy for further study in the United States requires close scrutiny of syllabi. Other oriental degrees and certificates have been cited previously in the description of certain "Institutions Deemed to be Universities."

12. Medium of Instruction

The medium of instruction in Indian higher education is changing from English to the regional languages with a somewhat accelerating pace especially in the arts and commerce degree areas. It is true that in the older universities English still prevails officially as the medium of instruction. However, even there, the trend is to allow the use of the regional language as the medium of instruction or at least as the medium of examination in the B. A. and B. Com. programs. In the newer universities the patterns include: (1) English for instruction and examinations; (2) both the regional language and English for instruction and examination at the undergraduate level but only English at the postgraduate level; (3) English for instruction but both the regional language and English for examinations; (4) English and the regional language for instruction and examination at all levels in all programs; and (5) English for the sciences and professional degree programs but the regional language for all others. The United States admissions officer therefore may wish to note that a student might have English as his medium of instruction and examination at the master's level yet have had the regional language as his medium from Class I through his bachelor's degree. Also to be noted is the fact that English is not likely to be studied before Class V and perhaps as late as Class VIII (especially in the rural areas)—and then as the student's second or third language, not as his mother tongue.

13. Examinations

In Gaudino's book cited above, the external examination system has been characterized as follows:

> To understand education in India, one must be aware of the apparatus of examination, this built-in system of question-asking outsiders, hectic memorization, long halls with the rows of writers. The first, most important, primary fact to stress is that the system of examination is ingrained, unashamedly and unflinchingly ingrained. It is an anchored fact, a down-to-the-depths and heavy-sinking fact of the student's life. It is not just a technique. It is the definition, the everyday-familiar assumption, the preconditioning of learning. The unformed infant student is nursed on the examination, takes it as his mother's milk, is seldom weaned away to other educational nourishment . . . All educators admit that examination marks are an inexact criterion, but they are the strong foundation, too much so, on which opportunities open up or narrow after graduation . . . It is not surprising to find the student tense about his examinations, apprehensive about their results, prime to riot about any inconvenience in their functioning.

As has been indicated previously, the trend is toward an external examination at least once a year. In the relatively few institutions on the semester and trimester systems, the external examinations come at the end of each such calendar term. The procedure may run much as follows: an external examiner (from another university) often sets or writes the examination within the scope of the syllabus published for the year and the degree to be examined. If there is a dispute between the external examiner and the dean of the responsible faculty on a question to be included (e.g., on the basis that it is outside the scope of the syllabus), the appropriate board of study in the university serves as the referee. The external examination then is administered under the supervision of the university but generally on the premises of the colleges at the first degree level. The annual examinations may be scheduled over nearly a three-week period. As the Schemes of Examinations in Appendix J show, three hours of examination time are alloted as a rule for each theoretical paper or subject in the B. A. and B. Sc. course. The practical examinations generally are a minimum of five hours in length. Also as Appendix J indicates, the examination time for other degrees varies (e.g., within the B. Engg. annual examinations).

14. Grading Practices and Examination Results

The grading of the external examinations likewise is done as a rule by external examiners. Should there be a dispute about the marks awarded any given student, the departmental head or dean of faculty may negotiate the issue with the external examiner. Should that not resolve the matter, the board of study or similar university body considers the dispute. Often if the difference in the dispute is within a 10% range, the resolution may be an average of the two sets of marks; otherwise an additional external examiner may be appointed to grade the disputed questions and his ratings considered final. "Grace marks" may be awarded under certain circumstances. For example, should a student miss the next division or class by a few marks because of a lower performance in a paper other than his principal or subsidiary subjects, he might be given "grace marks" sufficient to attain that next higher division. Or if the overall distribution of grading on the examinations for a particular degree should result in too few Division III awards, "grace marks" sufficient to boost enough candidates over the minimum for Division III may be awarded to all the candidates on that set of examinations. In a somewhat similar manner, the failure of a candidate on a particular paper may be "condoned or excused" should he otherwise have passed his papers with above-average performance.

"Supplementary" external examinations generally are held (often in September) for students who either missed or failed one or more papers or parts of the annual examinations (generally in April and/or May). Depending on the regulations of the university, the student's marks sheet for the supplementary examinations may show both "exemption" from the papers or subjects already passed and also the marks earned in the paper(s) taken in that supplementary; his division or class for the total examination as a rule may not by regulations be higher than a Pass or Division III. This sometimes is referred to as "passing an examination in compartments." "Exemption" also may mean the student's performance in a subject, other than his principal and subsidiary ones, on a previous examination was above a prescribed minimum that earned him an exemption from further examining in that subject; in this case, the exemption does not affect his earning a Division I or II. The term "exemption" also applies in the situation when a student seeks a second bachelor's degree or master's degree and is "exempted" from the requirement to sit for a paper that is common to both degrees (e.g., English or general education); here again the highest award of division may be Pass even though a calculation of overall marks might suggest a higher division was in order. A further variation is represented in the practice that at least a few Indian universities have had whereby a degree holder may seek a higher award or division by repeating the final year's external examinations for that degree; under such rules he may have to repeat only the examinations for the principal and subsidiary subjects but may be exempted from a repeat of the other subjects or papers.

Generally to be eligible to sit for the annual external examinations a student must have been enrolled in the university either in one of its colleges or in one of its teaching departments, must have met certain minimum attendance regulations and must have passed the college or house internal examination during that year. However, most Indian universities have provisions for certain categories of people to appear for the external examinations as external or private candidates (that is, without attendance in a college or teaching department of the university). These categories vary from institution to institution but often include teachers, librarians, military personnel, lawyers, female students and government employees.

"Internal assessment" has been a widely-discussed matter in Indian higher education. College or house examinations have been mentioned above. Such internal examinations are commonly held at the end of each of the three terms of the traditional annual calendar. Perhaps a somewhat typical pattern is to allocate three days for such examinations at the end of the first and second terms, to allow two hours for examining in each paper or subject and to examine the work done during that term; the examinations at the end of Term III may be three hours per paper and cover the whole year's syllabus. While promotion to the next year of study may be based on those examinations in whole or in part, a separate promotion examination may be required. In either case, weight may be given to performance in preceptorials/tutorials in determining both eligibility to take the university annual external examinations and to move to the next year of study in that college. Much less common is the practice of combining the results of internal evaluation with those of the external examinations in the calculation of the student's division or class at the end of a given year or for a given degree. Chapter VIII illustrates a "marks sheet" that involves the allowance for such internal assessment. In the illustration shown, a maximum of 30% of the total marks could have been earned by internal assessment.

The marks sheets referred to above also illustrates another aspect in the evaluation of student performance that should be of interest to the United States admissions officer. Not only is internal assessment, if considered at all, weighed more lightly in the final calculations than the external examination results, but also are the first years of a bachelor's degree as compared with the final year. In fact, the division awarded for the degree may represent only the performance in the principle and subsidiary subjects as well as primarily the last year's performance.

Again Robert Gaudino in his book on *The Indian University* has written:

> It is in the spring of the year that the student sits down to a full testing of his subject. It will not occur every year of his career [though that increasingly is the case], at one or two year intervals depending on the local regulations. Sometimes, there are house or college tests in between to keep him fit and determine his ability to go on. But it is the final degree examination which gives him his identity, which ranks him for life according to the divisions.

And indeed the student's division, especially for his first degree, may rank him for life. What constitutes this all-important system of divisions? Here it is virtually impossible to generalize without more exceptions than rules. For the first degrees 60% of marks or higher may be required for Division I, 45-59.9% for Division II and 33-44.9% for Division III. Yet some of the almost countless other patterns include:

Distinction	*Division I*	*Division II*	*Division III*
None Awarded	60% & higher	48-59.9%	33-47.9%
None Awarded	60% & higher	48-59.9%	36-47.9%
None Awarded	65% & higher	50-64.5%	None Awarded
None Awarded	60% & higher	50-59.9%	36-49.9%
None Awarded	60% & higher	45-59.9%	None Awarded
None Awarded	75% & higher	60-74.9%	50-59.9%
None Awarded	60% & higher	50-59.9%	40-49.9%
75% & higher	65-74.9%	40-64.9%	None Awarded
70% & higher	60-69.9%	50-59.9%	None Awarded
50% & higher	None Awarded	None Awarded	35-49.9%

The minimum percentage of marks required for a pass in a given subject may vary from 30% to 40%. To further confuse the credential evaluation process are such grading practices as these: (1) the awarding of Division I with Honours if the aggregate marks in the Optional subjects are 60% or higher and Division II with Honours if those marks are 45%-59.9%; and (2) awarding of no Division III degrees. The agricultural universities use an "overall grade point average" much as their United States land-grant university counterparts. The Indian Council for Agricultural Research recommends the following formula for the "interconversion" of that average and aggregate percentage of marks of India's traditional universities: $Y=50+10X+5X^2$ (where Y=aggregate percentage of marks in traditional universities and X=overall grade point average-3). Use of such a formula yields results such as these: 3.00=50.00%; 3.50=56.25% 4.0=65.00%; 4.5=76.25% and 5.0=90.00%. The I.C.A.R. also recommends that an overall grade-point average of 4.0 and higher be considered as the equivalent of a Division I and 3.0 to 3.99 as Division II. The grading practices of the Indian Institutes of Technology are described in the Engineering Education section of this chapter. The term "with honours" still is used occasionally at the first degree level in connection with the awards of first and second divisions (e.g., "First Division with Honours"). This phrase generally can be considered an honorific phrase of no particular significance. However, in connection with a

First Division award it may mean the equivalent of "Distinction" as it does in Punjab University. This use of "honours" in the award designation is not to be confused with the use of it in the designation of a degree (e.g., B. Sc. Honours). For the professional degrees such as M.B.B.S., B.D.S. and B.V.Sc.; the second degrees such as B. Ed. and B.L.; and the master's degrees, nearly the same diversity of grading patterns prevails. Differences are that such degrees are more likely to have no Division III awards, there is more use of "Distinction" as the top division, and higher minimums for passes in each paper may be required than at the first degree level.

Another grading pattern that may be confusing to the United States admissions officer is that of Madras University. Although that institution awards Divisions I, II and III for its degrees, a set of letter symbols is used to represent the range within which the candidate's marks fell on a given paper (and no detailed marks sheet then is furnished the candidate). The letter symbols and their meaning are:

H = Special Distinction: 100% of marks
D+ = Special Distinction: 85%-99.9%
D = Distinction: 75%-84.9%
A+ = 65%-74.9%
A = 60%-64.9%
B+ = 55%-59.9%
B = 50%-54.9%
C+ = 45%-49.9%
C = Minimum for pass to 44.9%
F = Failure

Appendix K contains a sample of a true copy of such a record.

Indian academic credentials may refer to "I Position in University," "I Position in College" or similar ranking. That refers to the relative rank of a student—on a given external examination—among all the university candidates or among all the candidates from his college that sat for that same examination at the same time. Such ranking is announced and recorded only for the top few positions.

Just as the United States grades of A, B, C, D and F are not too meaningful unless one knows the distribution of such grades in a given course, major, class, college or university, the Indian awards of divisions or classes likewise are difficult to evaluate in the isolated manner that so often seems inevitable to the United States admissions officer. Tables 2-7 and Appendix H have been designed to assist him with that problem and in particular to apply the admission and placement recommendations in Chapter IX.

From the tables and Appendix H one can see that the meaning of a Division I award, for example, varies tremendously among institutions, among types of degrees, among subject fields and at different degree levels. For example, at the bachelor's degree level, only 1% of the B. A. and B. Com. awards are Division I whereas 13% of the B. Sc. awards typically are in the first division. The M. A. degrees generally have 5% of the awards as Division I whereas the M. Sc. degrees have 28% Division I awards. It also should be noted that in both categories the percentage of Division III awards is much greater for the Arts than the Science degrees. Just as the percentage of Division I awards for B. Sc. degrees is much greater than that for the B. A. and B. Com. ones, likewise the percentage of Division I awards for the B. Engg. and B. Tech. (an average of 29%) is even greater than for the B. Sc.

Turning to the differences in universities, one finds that the percentage of Division I awards for the M. A. degrees varies from a low of 0.8% to a high of 29.8% with a mean of 5.5%. For the M. Sc. degree that range of variance is 15.4% to 55.1% with a mean of 29.4%. A similar variation exists among institutions offering bachelor's degrees.

Among subject fields at the master's level, the percentage of Division I varies from 1.8 for Sociology to 30.2 for Mathematics within the M. A. degrees and from 12.9% for Geography to 43.8% for Geology among the M. Sc. degrees. Percentages of Division III awards for each of those subject fields are: Sociology—58.8%; Mathematics—26.0%; Geography—2.8%; and Geology—2.3%.

Yet another aspect of examination results often overlooked is the percentage of passes (whether Division I, II or III) and failures among all candidates appearing for a given external examination. Only slightly more than 50% of the B. A. and B. Com. candidates passed in 1964 and 1965. While 1% of the Division awards for the B. A. and B. Com. were Division I, the percentage of all the candidates appearing at those examinations that received Division I was only 0.5%. Similarly for the B. Sc., since only slightly more than 50% of the candidates who appear for those degree examinations are successful, only some 6% of the total candidates achieve Division I awards though 13% of all the passing awards are Division I. Because the failure rate generally is not as high above the first-degree level, a similar adjustment to determine the "true" distribution pattern is not quite so dramatic in results.

High as the failure rate is on the first degree examinations as discussed above, the true failure rate is much higher. The University Grants Commission's *Studies in Examination Results* reports that the true failure rate based on failures not only in the degree examination but also such earlier examinations as the internal term and annual promotion ones generally approach 80% at the B. A. and B. Sc. level. Even among the professional and master's degrees the failure rate in the annual examinations is high. For example, 46% of the candidates appearing at the M. B. B. S. degree examination in 1965 failed; this is in a field that attracts the better student. Engineering also attracts the better student; yet in 1965 nearly 25% of the B.E./B. Sc. (Engg.) candidates failed in the annual external examinations.

C. ONE INDIAN UNIVERSITY

A somewhat detailed description or case study of one well-established Indian university may be the best and most interesting way to present a meaningful picture of university education in India. Of the many universities visited by this author the University of Delhi has been chosen for several reasons: (1) it is generally considered at least one of the better, if not indeed the best of Indian universities today; (2) a wealth of information is available on that institution; (3) it is in the forefront in much of the progressive change in Indian higher education; and (4) the scope of its offerings is substantial to furnish illustrations.

Delhi University was founded in 1922 as one of the *central* or Union-established, controlled and financed institutions. At first it was a *unitary teaching and residential* university: that is, an institution with its colleges under its direct control and generally on the same campus as the university teaching-departments themselves. However, since then Delhi has become a *teaching and affiliating* university: an institution with *teaching* departments as an integral part of its main campus; with *constituent* colleges (colleges also integral parts of the university but not necessarily on the main campus though generally in the same metropolitan area); and with *affiliated* colleges (colleges under management of other authorities, such as religious denominations, but affiliated with the university for examining purposes and subject to varying control of the parent university). In Delhi's case it now has some 48 constituent colleges and institutions, 14 of which are located on the main university campus. The others, and the 3 affiliated colleges, are situated throughout the Delhi territory which is called its *territorial jurisdiction*. However, in addition, Delhi University is empowered to teach and examine students throughout India in its Bachelor of Arts (Pass) *correspondence courses*. In 1966-67 Delhi had 31,886 undergraduate students and 5487 post-graduate students on its rolls. In addition it had 6272 registered in its B. A. (Pass) correspondence courses and 1392 women candidates registered as B. A. (Pass), M. A. and LL. B. *external or private* students (i.e., ones studying privately but registered to be examined for those courses of study). Like the United States urban university, Delhi has evening classes for such degrees as the B. A. (Pass); M. A.; LL. B.; M. Ed.; and B. Tech. and for several diplomas.

The governance of Delhi University consists of the Court, the Executive Council, the Academic Council, the Finance Committee, and the Faculties. The Court, as the supreme governing body, might be likened somewhat to the board of trustees of a United States university. The Executive Council as the executive body might be compared, but only roughly, to the executive committee of an American board of trustees. To the Academic Council is given the responsibility for the maintenance of standards of instruction, education and examination within Delhi University. The nine faculties coordinate Departments of Studies and make recommendations to the Executive and Academic Councils on the teaching and training within those departments. It is the Finance Committee's responsibility to oversee the budget activities of the university.

Officers of the university include the Visitor, the Chancellor, and the Pro-Chancellor (always the President, the Vice-President and the Chief Justice of India, respectively) but these are only titular heads of the institution. The *Vice-Chancellor* really is the chief executive, comparable to a United States university president. Delhi also has a Pro-Vice-Chancellor, whose function is almost that of a co-vice-chancellor. As in other Indian universities, the *Registrar* is the executive vice-president. Other officers include the *Treasurer* and the *Librarian*. The *Deans of Faculties* are the "senior-most" academic officers.

For most undergraduate courses of study the student applies to, is admitted by, and receives his instruction in one of the constituent or affiliated colleges. Less than half of the Delhi colleges are authorized to offer even B. Sc. (General) Group A or Group B course work. The B. Sc. (General) Group A is the less competitive first-degree program in Physics, Chemistry and Mathematics whereas the B. Sc. (General) Group B is the Botany, Chemistry and Zoology counterpart. The B. Sc. (Hons) *courses of study* (i.e., degree programs) are conducted by the teaching departments of Delhi University except that certain colleges, because of their quality, are allowed to offer the instruction in the *subsidiary* subjects (related minor) while the *principal* subjects (majors) are in the teaching departments of the Faculty of Science on the main campus. Similarly not all Delhi colleges may offer the B.A. (Honors) which is the arts degree program with more competitive admission and instructional standards. Many may offer only the B.A. (Pass), the less competitive and less demanding program. The *external examinations* (ones *set* or formulated and graded by Delhi University) for the *first degrees* (first bachelor's degrees) are given at the end of the second year (called *Part I*) and at the end of the third year (and called *Part II*). However, the national trend is toward external examinations at the end of every year and, where the semester and trimester calendars have been adopted, at the end of every such term. In addition, most Delhi colleges hold *house or college examinations* at the end of each term (three yer pear) for promotion to the next class and for eligibility to take the external University examination. To be eligible for either category of examination, regulations require attendance at a minimum of 2/3 of the lectures and 2/3 of the *practicals* (laboratory sessions) and *tutorials* (discussion session). The *post-graduate* (post-first degree) admission and instruction is under the jurisdiction of the Delhi teaching departments. However, certain colleges may offer instruction in the M.A. and M.Sc. subsidiary subjects and the professional colleges such as law and medicine also offer their own instruction for the professional degrees. The master's degrees generally are two years in duration generally with an examination at the end of each year (called *Previous* and *Final*). Doctoral degrees include the Ph.D. which requires research work in an approved topic over a two-year period of time beyond the master's and the submission of a thesis. The D.Litt., D.Sc. and D.C.L. are awarded on the merit of published work that has advanced knowledge in a given field by a Ph.D. holder.

In addition to degrees, Delhi University awards a number of diplomas. Illustrative at the undergraduate level are two-year diploma courses in languages that require only Higher Secondary background. More advanced courses include the Diploma in Office Supervision (with a Bachelor's degree as the minimum entry qualification) and the Post-Graduate Diploma in Linguistics (open only to M.A. degree holders).

Library facilities within Delhi University vary greatly. In one new college, only empowered to offer B.A. (Pass) instruction, this author found only several hundred volumes and many were extra textbooks. Yet in one of the best colleges the library had some 43,000 volumes with impressive reading rooms and 8 a.m. to 8 p.m. library hours. In addition, this latter college was fortunate to be relatively near the main campus and its library of about 250,000 volumes and 1000 periodicals. A recent Ford Foundation grant for books, equipment and acquisitions staff in the central library had raised annual acquisitions to approximately 25,000 volumes.

Five teaching departments within Delhi University have been designated by the University Grants Commission as Centers of Advanced Study: Botany (Plant Morphology and Embryology); Chemistry (Chemistry of Natural Products); Economics (Economics of Developmen and Economic History); Physics (Astrophysics and Theoretical Physics); and Zoology (Cell Biology and Endocrinology). The grants accompanying the designations have provided for such equipment as IBM 1620 computers and an electron-microscope, for additional staff, and for seminars. All these departments have strong staffs, first-rate facilities, substantial research programs and sizeable master's and doctoral enrollments.

Delhi University was on a traditional academic calendar in 1967-68 when this author visited it (and his oldest daughter began her college career there). On the traditional calendar, the First Term is generally from mid-July to the end of September; the Second, from mid-October to nearly the end of December; and the Third, from shortly after January 1st to the end of April. The class day typically begins at 9:10 a.m. with a ten-minute assembly followed by 35-minute class periods; the eleventh or generally last period ends about 6:30 p.m. The class week is a six-day one but, as in the United States depending on the individual student's subjects and schedule of classes, he may not have classes every day and certainly will not have classes every period of the day. The medium of instruction for all courses in Delhi University officially is English. However, in the case of the B.A. (Pass) and the subsidiary subjects for the B.A.(Hons.), the candidate has the option of answering examination questions in Hindi. Also in the B.A. (Pass) course History, Economics and Political Science may be taught in Hindi.

Minimum admission requirements for the B.A. (Pass) course of study is the Higher Secondary or its equivalent with 40% of marks *in the aggregate* (overall). The B.A. (Hons.) admission standard is higher but varies with the field of study and the Delhi college sought by the applicant. On the degree examination a Division I requires 60% or above total marks; Division II, 50%-59%; and Division III, 36-49.9% for B.A. (Pass) and 40-49.9% for B.A. (Hons.). As Appendix H shows, typically less than 1% of the B.A. examination candidates receive Division I; about 5%, Division II; about 50%, Division III; and some 44% fail.

The colleges within Delhi University vary widely in quality. This difference is in part a function of the admissions standards as indicated earlier, for the quality of the student body differs not only among the colleges but also within a given college in the different degree programs. A number of the older colleges (one dates from 1824) under private management visited by this author were found to be excellent in terms of their faculty, their physical facilities, the extent of the courses of study being offered, their controlled enrollment, their competitive admissions, their extracurricular programs. On the other hand some of the newer colleges were at the other end of the quality spectrum by most, if not all, of these criteria.

As in the Indian universities each college is headed by a principal some of whom, but not all, hold doctoral degrees. In size, they vary from about 150 students with 6 teachers to over 1500 students with 80-90 teachers. A few of the older colleges do have hostels (that is, dormitories) but even those colleges have a large percentage of commuting students from the Delhi area (now over 2 million in population). Games and sports are a very prominent part of the activities of most colleges. Tuition and fees in Delhi University colleges in 1968 ranged from Rs. 15 ($2.00) per month for most first-degree programs to Rs. 22 ($3.00) per month for the M.B.B.S. course. Boarding and lodging expenses were about Rs. 75 ($10.00) per month.

D. AGRICULTURAL AND RURAL EDUCATION

Because of the importance of agriculture in the Indian economy, some attention is due to agricultural and rural higher education. Perhaps at the apex is the Indian Agricultural Research Institute (I.A.R.I.) in New Delhi. Founded in 1905 in Pusa, Bihar State, with funds donated by an American named Phipps (PUSA=Phipps U.S.A.), the Institute has, since 1920, awarded a two-year Associateship of the I.A.R.I. course at the post-graduate (post-first degree) level. Since 1958, when designated as one of the institutions Deemed to be Universities, the I.A.R.I. has awarded the M.Sc. and Ph.D. degrees in all the major disciplines of agriculture. Many of the some 1000 graduates of its Post-Graduate School have been key persons in the establishment of the Agricultural Universities in the various states. Highly competitive in admission because of the demand for its 150 new places each year, the I.A.R.I. degree programs have a credit-course system very similar to the United States pattern. The M.Sc. degree requires two academic years of course work, research, thesis preparation, and examinations. For the Ph.D., the typical I.A.R.I. student spends three years in course work and research. With the aid of such United States foundations as the Rockefeller Foundation, this institute has developed its 1400 acre campus extensively and its library of over 200,000 volumes is said to be the largest such library in Asia.

The land-grant state university in the United States has been the pattern for the development of the Agricultural University in India. The objective is to establish at least one in each state for the training of needed personnel and for the extension of the technology of agriculture to farmers and research on the development of that technology. While, as the *Education Commission Report of 1964-66* explained, the growth of the several agricultural universities has been quite uneven, still they have played a leading role in the Green Revolution alluded to in Chapter II. Perhaps the best regarded of these new institutions is the Punjab Agricultural University. Established in 1962 on the base of three agricultural colleges, the university has three campuses in Punjab and Haryana States and Himachal Pradesh Territory. With the technical assistance of a major United States land-grant university and funds from the United States Agency for International Development, Punjab Agricultural University now has eight constituent colleges — three agricultural, one basic sciences and humanities, one agricultural engineering, one home science, one veterinary medicine and one animal sciences. Organized on the trimester system and conducting examinations on a trimester basis (instead of on the traditional annual basis), it also resembles the United States university with its A-B-C-D-F grading system, its course and credit system, and its comprehensive evaluation of students. Its B.Sc. (Agri.) is a five-year degree after the Secondary School Certificate (four years after the Pre-University or Higher Secondary Certificate); the B.V.Sc., B.Sc. (Home Science) and B.Sc. (Agri. Engg.) are four-year degrees beyond the Higher Secondary or Pre-University. For the M.Sc. (Agri.) two years of study are required. Agricultural colleges affiliated with traditional Indian universities exceed 60 in number. It has been recommended that these schools be transferred to the agricultural universities. One such college is the Agricultural College and Research Institute at Vellayani, Kerala State. Founded in 1955 and affiliated with Kerala University, this college offers instruction toward the B.Sc. (Agri.), the M.Sc. (Agri.) and the Ph.D. and has four post-graduate departments—agricultural botany, agricultural chemistry, agricultural entomology and plant pathology.

In 1956 the Government of India, through the National Council for Rural Higher Education, launched a plan to provide higher education to youth in a rural environment. The objective is to train them for careers in rural development while at the same time inculcating in them sympathy for and interest in the rural way of life. Rural Institutes (at least 14 in number) are the vehicle for this education. A 3-year diploma in rural sciences, a 3-year diploma in civil and rural engineering, a 2-year certificate course in agricultural science and a 1-year certificate course in sanitary inspection are the usual programs. Their diplomas in rural services and in civil and rural engineering now have been recognized as first degrees by the Government of India and most State governments for employment purposes, whereas earlier they were accorded only the equivalency of the Intermediate Certificate. Also, more than 35 universities and the Inter University Board have recognized the diplomas in rural services as first degrees for purposes of admission to certain post-graduate work (including humanities, education and law). The diploma in civil and rural engineering also is recognized by at least two Indian universities for admission to part-time degree course in engineering and the national diploma course. Plans have been formulated to declare at least three of the Rural Institutes as "deemed universities." In addition at least two such institutes have become affiliated colleges: the Rural Institute at Udaipur, now affiliated with the University of Udaipur; and the Jamia Rural Institute affiliated with the Jamia Millia Islamia. The latter institute is replacing its diploma in rural services with a B.A. (Hons.) course in social work. The G. K. Institute of Rural Education in Gargoti, Maharashtra State, though not affiliated with Poona University, is recognized by that university for research towards the Ph.D. to be awarded by Poona. A partial list of the Rural Institutes is provided in Appendix G.

E. BUSINESS ADMINISTRATION AND MANAGEMENT EDUCATION

Although perhaps more than 200,000 students are enrolled in B. Com. and M.Com. degree courses of study, as Haggerty has stated in his book *Higher and Professional Education in India,* "commerce courses are not considered truly professional in the sense that they prepare students for a high level leadership in the business world." The B.Com. degree of three-years' duration (after the Higher Secondary School Certificate or Pre-University course) generally has an examination at the end of each year. Its curriculum typically is as follows: Part I (First Year)—English and Current Affairs, Bookkeeping and Accountancy, Business Methods, Mathematics, and Principles of Economics; Part II (Second Year) English and Current Affairs, Higher Accountancy, Statistics, Money, Banking and International Trade, Industrial and Commercial Law, and Industry and Transports; and Part III—Compulsory: Auditing and Cost Accountancy, Business Organization and Management, Company Law and Secretarial Practice, Taxation Laws and Accounts, and Indian Economic Problems; Optional: one of the following: Co-operation, Insurance, Banking, and Organization and Management of Foreign Trade. The M. Com. is a two-year degree after the B.Com. and often requires a thesis.

Three institutes of management deserve some attention. The two Indian Institutes of Management in Ahmedabad and Calcutta have been established by the Government of India with the collaboration of the Gujarat and West Bengal States, Indian industry, the Ford Foundation and two United States universities. The Institute in Ahmedabad has had the Harvard Graduate School of Business Administration as its "educational collaborator" by means of visiting faculty, training of Institute faculty and advisory services. For the Calcutta Institute, the Massachusetts Institute of Technology has served as the educational collaborator in a similar manner. The Post-Graduate Diploma in Business Administration of each Institute is recognized as equivalent to a Master's degree for purposes of appointment to superior services in the Union Government and by a number of quality United States universities for admission to Ph.D. study. Should the Institutes be declared "Institutions of National Importance" as planned, this diploma undoubtedly would become the Master of Business Administration degree. In addition to the two-year Post-Graduate Programmes in Business Administration, for which the nation-wide admission competition is usually keen, doctoral degree programs are planned. The Institutes also are active in Executive Development Programmes and other types of continuing education, in consultative work with the Indian businesses and industries and in research. The Institutes also are working with certain Indian universities to develop schools of business management elsewhere in India. The third Institute is the Xavier Labor Relations Institute. Located in one of India's new industrial cities, Jamshedpur, this institution was founded in 1948 with the cooperation of Georgetown University and local industry. Its two post-graduate programs (each of two-years full-time or three-years part-time duration) are: one in Industrial Relations and Social Welfare for which the M.A. degree of Ranchi University is granted (though Xavier Institute is not affiliated officially with that university) and, a second one in Business Management for which an Honors Diploma is awarded by the Institute itself. Since January 1970, the Government of India has recognized the Diplomas of Xavier Institute as equivalent to an M.B.A. degree for purposes of recruitment to superior posts and services. In 1967 Xavier Institute signed an academic collaboration agreement with a consortium of five United States universities and colleges for further development of its academic and research facilities.

A number of Indian universities have begun Master of Business Administration or Business Management programs generally of two-years' duration. Andhra, Banaras Hindu, Delhi and Osmania Universities now award M.B.A. degrees. Other universities such as Calcutta, Gorakhpur and Madras offer instead the post-graduate Diploma in Management.

F. ENGINEERING EDUCATION

Education in engineering and technology has been emphasized in India mainly because of its needs as a developing country but partly because of wars with China and Pakistan. The Ministry of Education in its *Facilities for Technical Education in India 1965* reported that the number of institutions with the first degree courses in engineering and technology increased from 38 in 1947 to 118 in 1963-64 and ones with diploma courses from 53 to 248 in the same period. The admission capacity of those institutions rose from 2940 to 21,040 for degree courses, and from 3670 to 39,712 for diploma courses during that period. By 1967-68, the higher education enrollment in engineering and technology had reached 104,266 and included many of India's best students. However, in 1968-69, that total dipped to 101,380, undoubtedly due, at least in part, to the growing unemployment and underdevelopment of "graduate engineers"—as engineering degree holders are generally called. Until recently at least, some 9000 first degrees in engineering and technology have been awarded annually. It has been estimated that 60% of the Indian applicants for graduate study in the United States have pursued engineering and technology degrees in their homeland. *Open Doors 1970,* the annual census by the Institute of International Education, reports that of the 11,327 Indian students in United States higher education in 1969-70, 5532 were in engineering and 4131 of those were studying at the United States graduate level.

The diploma courses in engineering and technology in the polytechnics and rural institutes have been discussed in Chapter V—Secondary Education, mainly because of the number of such institutions that do not require the Higher Secondary School Certificate for admission. Also, the role of the All-India Council for Technical Education has been treated elsewhere (Chapter III—Development of Indian Education).

The degree institutions might be categorized as follows: (1) the Indian Institutes of Technology; (2) the Regional Engineering Colleges;

and (3) other engineering and technological institutions. Although these are not mutually exclusive as categories of quality, they may serve as useful frames of references for a better understanding of Indian engineering and technological education. The Indian Institutes of Technology in Bombay, Kanpur, Kharagpur, Madras and New Delhi have been established and maintained not only with extensive help from the Union government but also with assistance from foreign governments. Kharagpur, the first of the I.I.T.'s and founded in 1950, has received assistance from a number of international agencies. The governments aiding the other I.I.T.'s have been the U.S.S.R. (I.I.T.—Bombay), the U.S.A. (I.I.T.—Kanpur), West Germany (I.I.T.—Madras) and Great Britain (I.I.T.—New Delhi). All five have been designated as "Institutions of National Importance" and empowered to award degrees. As types of institutions they are unitary and residential: that is, each is concentrated on one campus and its students all are in residence. Their combined enrollment is about 8000 with a range from about 1100 at Kanpur to over 2300 at Kharagpur. Because of their modern facilities, salary scales, progressive administration and policies, and curricula, they have attracted excellent faculty and, in turn, top students. Their competitive admissions involve some 18,000 applicants who vie for approximately 1800 seats or places annually in the first degree courses. An all-India admissions test (lasting for three hours on each of four subjects) is conducted in at least five testing centers as part of the screening. That process also includes interviewing the 2500 top applicants after a review of previous academic work and the admission test results.

The five-year Bachelor of Technology degree (after the Higher Secondary School Certificate), the two-year Master of Science and Master of Technology degrees, and the Ph.D. in Science and in Engineering are offered at the five I.I.T.'s. A variety of post-graduate and post-master diplomas in engineering and science fields also are available. The semester academic calendar and examinations predominate. By and large, the grading systems are better types but their meanings differ from I.I.T. to I.I.T.; an explanation is shown on the I.I.T. "grade Card" or marks sheet, a sample of which is a part of Appendix J—Samples of Selected Indian Credentials. The trend is definitely toward internal examinations rather than external ones in the Indian Institutes of Technology and the division awarded for the first degrees generally is based on an average of the performance in all five years of study. The medium of instruction is English in all five institutes.

Three of the "Institutions Deemed to be Universities" have engineering and technology as their emphasis. The Birla Institute of Technology in Pilani was founded in 1964 in close collaboration with the Massachusetts Institute of Technology and has had the continued assistance of M.I.T. and the Ford Foundation. While it does not offer the Bachelor and Master of Engineering and Master of Science (Technology) degrees, the B.A. and B.A.(Hons.), B.Sc. and B.Sc. (Hons.), B.Pharm.(Hons.), M.A., M.Sc., M.B.A. and Ph.D. degrees also are awarded. The B.I.T.S. grading and examination practices and academic calendar closely resemble those of the I.I.T.'s. The Indian Institute of Science in Bangalore, established in 1909 with considerable private support, is a teaching and residential institution that concentrates on the Bachelor of Engineering and Master of Engineering degrees though research degrees in science and engineering also are conferred. Although the semester system is used and English is the medium of instruction as in the B.I.T.S., the grading system is more traditional: Pass—55 to 69.9%; and Pass with Distinction—70% and higher. The Indian School of Mines has a history dating from 1926. Until 1964 it awarded Associateships of Indian School of Mines (A.I.S.M.) Diplomas in applied geology, applied geophysics, mining engineering and petroleum technology that generally were considered as equivalent to Indian university degrees. Between 1964 and 1967 (when declared autonomous) the I.S.M. was affiliated with Panchi University for the B. Sc. and M. Sc. degrees. These degrees now are conferred by the Indian School of Mines. Annual examinations are held and Division I requires 65% of marks or higher and Division II, 50-64.5%.

The University of Roorkee had as its antecedent the Thomason College of Engineering which came into being in 1848, ten years before the first Indian universities. This author found Roorkee generally considered within India as comparable to the Indian Institutes of Technology. Specializing in architecture, engineering and technology, this institution confers the B. Arch., B. E., M. E., and M. Sc. degrees and post-graduate diplomas. The semester system has been adopted but a traditional marks or grading system is used (e.g., Honours: 75% and above; Division I: 65-75.9%; and Division II: 50-64.9% for the B. E. Course).

The Regional Engineering Colleges, affiliated with State universities, have received considerable assistance from the Union government but have had a somewhat uneven pattern of development as a group though a number have modern facilities and well-regarded faculty. Typically they offer instruction for the Bachelor of Engineering degree. In addition to these Regional Engineering Colleges, many other colleges of engineering and technology are affiliated with Indian universities. Besides having the first degree courses of study, these colleges often provide instruction for the master's degrees (and even for the Ph. D. in a few colleges) in engineering and technology and a number are old, well-established and highly regarded institutions. Another institution worthy of mention is the Madras Institute of Technology (not the same as the Indian Institute of Technology—Madras). This institute is not affiliated with any university and awards the Diploma of Madras Institute of Technology (D.M.I.T.) in Aeronautical, Automotive and Electronics Engineering and Instrument Technology. This diploma is considered the equivalent of a first degree in engineering by the Government of India. Admission for its three year diplomas requires a minimum of a B. Sc. degree in Division II and with 50% of marks in Mathematics and Physics.

"Five-Year Integrated Degree Course in Engineering" appears often on marks sheets and in syllabi and other references. The "integration" to which that title refers is that of the first year of the B. Sc. degree course and the four years of engineering (also the Intermediate Science Certificate and three years of engineering or other combination amounting to five years of education beyond the Higher Secondary or Pre-University level. This five-year degree plan is universal in Indian higher education today though not every engineering institution may offer all five years on their premises but, in such instances as a transitory measure, will allow the first year of science to be taken in the science faculty of the university or in a recognized affiliated college (or even the first two years where the Intermediate pattern still prevails).

The Bachelor of Engineering Scheme of Examinations and Teaching Schedules in Appendix J illustrate one degree plan wherein four years of engineering follow the first year of the B. Sc. degree course which the student must present to gain admission.

Tables 4 and 5 and Appendix H contain data on annual examination results for the use of the United States admissions officer in the evaluation of the quality of the Indian engineering applicant and his institution.

G. HEALTH SCIENCE EDUCATION

Medical education in India is said to date from the sixth century B.C. With the coming of the British to India, Western medicine was introduced into the country. From the establishment of the Univerities of Bombay, Calcutta and Madras in 1857, the M.B.B.S. (Bachelor of Medicine and Bachelor of Surgery) degree was awarded. Today medical education in India is regulated by the Indian Medical Council. An estimated 100 medical colleges exist today, affiliated to about 40 universities. Over 80 offer post-graduate diplomas and/or degree courses beyond the basic M.B.B.S. Established in 1956 by Act of Parliament to provide leadership in the development of effective medical education and high standards for the medical and other health professions, the All-India Institute of Medical Sciences in Delhi is the leading institution in health education. Recognized as an Institution of National Importance, its three main objectives are: the training of medical teachers for other Indian medical colleges; experimentation in medical teaching methods; and medical research. Located in modern, extensive facilities the Institute has received substantial support from United States foundations for modern equipment. Typically some 2000-3000 apply for the M.B.B.S. program of which about 600-700 are examined in one of five national centers. Ninety to 100 are interviewed and 50 admitted for the course that lasts 4½ years beyond the Pre-Professional (Medical) or 16½ years of total schooling. A one-year internship and one-year residency follow the M.B.B.S. Over 300 students are enrolled at the post-graduate (post-M.B.B.S.) level. The M. D. and M. S. degrees of three-years duration prepares students for medical teaching posts whereas the Ph. D. is basic medical sciences and the D. Sc. are research degrees.

Long-range plans for Indian medical education call for six other institutes to form a system of regional medical institutes. In 1967-68, two of the six had been established: the Institute of Post-Graduate Medical Education and Research in Chandigarh (affiliated with Punjab University) and the Jawaharlal Institute of Post-Graduate Medical Education and Research in Pondicherry (affiliated with Madras University). The Bachelor of Unani Medicine and Surgery (B.U.M.S.) is the basic degree in the unani system of medicine and typically is five years beyond the Pre-University or its equivalent. In the ayurved system of medicine the Bachelor of Ayurved Medicine and Surgery (B.A.M.S.) requires four years of study after the Pre-University or its equivalent. In the other health science, dental education includes the Bachelor of Dental Surgery which is a 4-year degree course that typically requires the Pre-Professional or Preliminary Examination or its equivalent (12 years of schooling) for admission. Following the B. D. S. is the Master of Dental Surgery degree generally of two years duration. These courses of study may be part of the Faculty of Medicine in an Indian university but may be in a separate faculty, as in Bombay University. Nursing education also is available in Indian universities in the form of Bachelor of Science in Nursing and Master of Nursing degree programs. At least ten universities award the B. Sc. in Nursing degree (usually four years after the Secondary School Certificate) but only some 600 degrees in nursing have been awarded since 1946. At this point, the All India Institute of Hygiene and Public Health (affiliated with Calcutta University) might be mentioned. Founded in 1932, it offers an array of post-graduate diplomas and certificates in public health, maternity and child care, dietetics, industrial hygiene, nutrition, public health nursing and nursing supervision. Post-graduate diplomas and certificates in such fields at the institute, and elsewhere in India, vary greatly in length.

Pharmacy education has had a Diploma in Pharmacy course since 1948. The two-year program has required the Secondary School Certificate or its equivalent for entry and its examination often is called the Intermediate Examination in Pharmacy. Besides the two years of academic training, practice training in the amount of 750 hours is required. The Diploma is considered as minimum preparation for drug dispensing and chemist (drug) store management. The B. Pharm. degree in India dates from 1932, is available in at least a dozen Indian universities and is granted three years after the Diploma or four years after the Pre-University plus three months of practical training. At the master's level, the M. Pharm. degree generally is 1½ to 2 years in length with 1 year of course work and a thesis. The All-India Council of Technical Education exercises All-India surveillance over standards in pharmacy education.

H. TEACHER EDUCATION

In India, the majority of the trained teachers are educated in the institutions such as listed in Appendix F—Institutions with Non-Affiliated Courses. While a number of those schools are part of universities, the licentiates, diplomas and certificates in education, in physical education, in physical training, in arts and crafts teaching, and in basic education and training typically are controlled by and examined for by such authorities as state ministries of education and their directorates. Typical admission requirement for an institution training pre-primary and primary teachers is the completion of the lower secondary stage of Indian education (Class X). The teaching training certificate (T.T.C.) course of study at this level normally is a two-year course. This curriculum generally is divided into a theoretical portion and a practical work portion. In the former, the subjects include principles of education, child development or child psychology, methods of teaching, school organization and health education. In the latter portion, crafts, practice teaching and activities of community living are covered. Perhaps more than 1400 institutions admit more than 130,000 students annually for this level of teacher education.

Trained secondary teachers are to come from the university-related teacher training programs leading to the Bachelor of Education or Teaching degree. However, a large percentage of India's secondary teachers do not have such training and many have come from such programs as the Secondary School Teachers Certificate courses identified in Appendix F. The Bachelor of Education or teaching degree is supervised by the university though the instruction typically is conducted in one of the more than 250 constituent and affiliated training colleges. For admission, the prospective teacher is required to hold a bachelor's degree in arts, science or commerce. The usual one-year curriculum consists of: philosophical and sociological foundations of education, principles of school organization, educational psychology, problems of Indian education, health education, and principles and methods of teaching, and practice teaching. Appendix J—Syllabi, Examination Schemes and Teaching Schedules contains a sample of B. Ed. Scheme of Examination and Syllabus of Study that further outlines this degree. Also, at this level are post-graduate (i.e., post-first degree) diplomas in such areas as physical education of one-year duration and requiring a bachelor of arts, science or commerce for admission.

Indian universities also have certain teacher training at the first-degree level. Examples include the Bachelor of Technical Education and the Bachelor of Physical Education. These first-degrees are not comparable in length to the Bachelor of Education or Teaching degree, that is, a second-degree. Also at this undergraduate level are undergraduate diploma programs in such areas as education, teaching of crafts, and early childhood education. The admission requirement for these undergraduate diploma courses may be either lower secondary or secondary school completion and their duration typically varies from one to two years.

Advanced training in education is provided in the Master of Education degree course. For admission, the student needs the Bachelor of Education or Teaching as the minimum qualification. As much as three years of teaching experience also may be required for admission to a M. Ed. program. Typically one-year in duration, this degree course may require a dissertation or a report on related practical work. Subjects studied may include: philosophical and sociological foundations of education; methodology of educational research; and a choice of: advanced psychology; educational planning, administration of finance; comparative education; curriculum development; teacher education; guidance and counseling; educational measurement and evaluation; and history of educational thought, philosophy and sociology of education. Also at this level are certain post-graduate diploma programs in educational administration and guidance and counseling.

The Central Institute of Education and the Regional Colleges of Education play a leading role in the improvement of teacher education throughout India. It is through these institutions that the National Council of Educational Research and Training (mentioned briefly in Chapter III) carries out much of its mission as "the professional arm of the Union Ministry of Education." The Central Institute of Education has had a prominent role in this regard. However, as a constituent college of Delhi University, C.I.E. is becoming more and more the Delhi School of Education and its national role will arise increasingly out of its leadership as a catalyst and pace setter in educational matters, especially those related to the secondary level. Courses of study include B. Ed., the B. Ed. by correspondence and the M. Ed. (and research in education toward the Ph. D.). Many of its graduates join the staffs of other teacher training institutions throughout India.

The four Regional Colleges of Education are located in Ajmer, Bhopal, Bhubaneswar, and Mysore and are affiliated with Rajasthan University, Vikram University, Utkal University and Mysore University respectively. Besides the courses of study leading to such degrees as the B. Ed. and M. Ed., these institutions are the foci of much extension and in-service training activity. For example, summer institutes especially in the sciences have been organized at three colleges with the assistance of the University Grants Commission and the United States Agency for International Development. The latter agency has provided books, equipment and United States faculty to serve as institute coordinators and instructors. The Regional Colleges of Education also have played a part in the B. Ed. correspondence course, as is indicated shortly, and with their Demonstration Schools as laboratories for the development of new teaching methods and curricula.

As part of the efforts to meet the shortage of qualified teachers at all levels, correspondence courses leading to the B. Ed. and the M. Ed. degrees have been instituted under the supervision of the Central Institute of Education. The sixteen-month B. Ed. course includes a two-month summer school at either the C.I.E. campus in Delhi or one of the Regional Colleges of Education. In 1967-68 nearly 500 teachers were enrolled for such study. At the master's level the Central Institute of Education enrolled its first students in the M. Ed. correspondence course in 1966. Both correspondence degrees are to follow the same syllabus of study and scheme of examination as the regular B. Ed. and M. Ed. degrees.

The Central Institute of English was established in 1958 as an autonomous unit on the campus of Osmania University. Its purposes are: to train teachers of English at various levels; to do research on the English language and linguistic pedagogy; and to produce teaching material. Assisted by the Ford Foundation, this institution is recognized as a center for research toward the Ph. D. degree of several universities. In addition, it awards a one-year Post-Graduate Diploma in the Teaching of English and a one-year Research Diploma. Like the Central Institute of Education, this institute also is active in extension services and summer institutes and plans to launch correspondence courses and programmed instruction materials for teachers of English.

Problems related to the quantity and quality of teachers in India have been discussed in Chapters IV, V and VII.

TABLE 3. AWARDS OF DIVISION I, II AND III IN BACHELOR'S DEGREES ARTS, SCIENCE AND COMMERCE 1964 AND 1965—ALL INDIA

	Division I	*Division II*	*Division III*
B.A./B.Com.	1%	24%	75%
B.Sc.	13%	41%	46%

Source: "Gradings in University Degrees," *Technical Manpower,* Bulletin of the Division for Scientific and Technical Personnel, CSIR, March 1969.

TABLE 4. AWARDS OF DIVISION I, II AND III IN BACHELOR OF ENGINEERING AND TECHNOLOGY DEGREES—AVERAGES FOR 1956, 1961 AND 1965—ALL INDIA

Engineering Field	*Division I*	*Division II*	*Division III*
Chemical	35%	53%	12%
Civil	19%	69%	12%
Electrical	33%	58%	9%
Mechanical	36%	56%	8%
Metallurgical	37%	48%	15%
Mining	33%	62%	5%
Overall Average	29%	61%	10%

Source: "Gradings in University Degrees," *Technical Manpower,* Bulletin of the Division for Scientific and Technical Personnel, CSIR, March 1969.

TABLE 5. AWARDS OF DISTINCTION/HONOURS, DIVISION I, II AND III/PASS IN BACHELOR OF ENGINEERING AND TECHNOLOGY DEGREES—EIGHTEEN INDIAN INSTITUTIONS—1969

	Honours or Distinction	*Division I*	*Division II*	*Division III or Pass*
Banaras Hindu University*				
Civil	4	22	27	—
Elec.	4	47	55	—
Mech.	41	67	5	—
Baroda University				
Chem.	12	14	10	—
Civil	10	39	33	—
Elec.	7	24	22	1
Mech.	69	40	4	—

TABLE 5. AWARDS OF DISTINCTION/HONOURS, DIVISION I, II AND III/PASS IN BACHELOR OF ENGINEERING AND TECHNOLOGY DEGREES—EIGHTEEN INDIAN INSTITUTIONS—1969
(continued)

	Honours or Distinction	*Division I*	*Division II*	*Division III or Pass*
Birla Institute (Pilani)				
Chem.	7	12	7	—
Elec.	6	32	22	—
Elec. Tel.	7	15	4	—
Mech.	12	54	23	—
Bombay University				
Civil	—	8	32	22
Elec.	—	6	44	9
Mech.	—	11	59	9
Burdwan University				
Civil	—	24	13	—
Elec.	—	35	21	—
Mech.	—	53	36	—
Metall.	—	27	17	—
Delhi University				
Civil	—	15	21	—
Elec.	1	37	23	—
Mech.	1	54	19	—
Gujarat University				
Civil	—	2	63	21
Elec.	1	7	53	8
Mech.	—	6	42	1
I.I.T. Bombay				
Civil	—	14	23	—
Chem.	—	42	27	—
Elec.	—	23	34	—
Mech.	—	40	19	—
Metall.	—	22	23	—
I.I.T. Delhi**				
Civil	5	9	10	10
Chem.	3	10	9	10
Elec.	4	19	8	7
Mech.	10	28	2	6
I.I.T. Kharagpur***				
Civil	—	29	17	—
Chem.	—	16	12	—
Elec.	—	13	18	—
Elec. Tel.	—	16	12	—
Mech.	—	35	24	—
Metall.	—	16	11	2
Mining	—	5	6	—

TABLE 5. AWARDS OF DISTINCTION/HONOURS, DIVISION I, II AND III/PASS IN BACHELOR OF ENGINEERING AND TECHNOLOGY DEGREES—EIGHTEEN INDIAN INSTITUTIONS—1969
(*continued*)

	Honours or Distinction	*Division I*	*Division II*	*Division III or Pass*
Indore University				
Civil	—	14	32	—
Elec.	—	30	28	—
Mech.	—	29	17	—
Marathwada University				
Civil	3	7	21	13
Elec.	6	8	8	4
Mech.	10	9	6	3
Nagpur University				
Civil	11	8	1	—
Elec.	10	19	8	—
Mech.	29	28	1	—
Metall.	9	—	—	—
Punjab University				
Civil	4	63	—	26
Elec.	17	85	—	17
Elec. Tel.	10	19	—	1
Mech.	34	88	—	5
Metall.	2	18	—	3
Punjabi University				
Civil	4	43	7	—
Elec.	12	44	2	—
Mech.	16	43	1	—
Rajasthan University				
Elec.	2	22	7	—
Mech.	7	8	6	—
Sambalpur University				
Civil	8	16	3	—
Chem.	7	12	9	—
Elec.	9	19	22	—
Mech.	13	34	22	—
Metall.	13	17	10	—
Sardar Patel University				
Civil	1	10	20	—
Elec.	7	24	26	3
Mech.	18	44	23	—

*1968 data.

**Div. II divided into "Above 60%" and "Below 60%"; latter tabulated here as Div. III.

***Five Year B. Tech. Degree Course.

Source: Mimeographed Paper by Dorothy Benedict, Foreign Examinar, Graduate School, University of Wisconsin-Madison.

TABLE 6. AWARDS OF DIVISION I, II AND III IN MASTER'S DEGREES IN ARTS AND SCIENCES—ALL INDIA

	M.A.			M.Sc.		
	I	II	III	I	II	III
1959	4.5%	41.9%	53.6%	26.7%	54.7%	18.6%
1960	4.4%	38.2%	57.4%	27.8%	56.7%	15.5%
1961	4.7%	42.8%	52.5%	28.0%	56.5%	15.5%
1962	4.4%	45.3%	50.3%	26.7%	57.8%	15.5%
1963	5.3%	50.9%	43.8%	28.2%	59.0%	12.8%
1964	5.3%	50.1%	44.6%	28.2%	59.6%	12.2%
1965	5.4%	52.8%	41.8%	29.8%	59.6%	10.6%
1966	5.5%	55.5%	39.0%	29.0%	60.1%	10.9%
Approx. Median	5%	48%	47%	28%	58%	14%

Source: "Gradings in University Degrees," *Technical Manpower*, Bulletin of the Division for Scientific and Technical Personnel, CSIR, March 1969.

TABLE 7. AWARDS OF DIVISION I IN MASTER'S DEGREES IN ARTS AND SCIENCE BY UNIVERSITY—1965 AND 1966

	M.A.		M.Sc.	
University	*No.*	*Percent*	*No.*	*Percent*
Agra	516	4.9	419	20.2
Aligarh Muslim	56	6.1	76	26.0
Allahabad	84	6.4	93	27.7
Andhra	58	13.8	261	55.1
Annamalai	36	29.8	96	38.4
Banaras	51	3.7	142	43.7
Bangalore	6	3.1	91	28.5
Baroda	14	7.4	61	25.3
Bhagalpur	23	2.2	10	15.6
Bihar	87	4.8	45	15.2
Bombay	46	5.3	93	20.9
Burdwan	5	2.4	18	28.6
Calcutta	112	2.2	231	25.9
Delhi	256	13.5	151	61.1
Dibrugarh	0	0.0	—	—
Gauhati	16	1.8	81	23.6
Gorakhpur	17	1.5	39	16.7
Gujarat	27	3.3	121	29.2
Indore	56	6.0	57	28.9
Jabalpur	54	5.7	78	33.9
Jadavpur	22	5.0	77	47.0
Jammu and Kashmir	74	12.6	35	20.8
Jiwaji	40	3.9	67	28.5
Jodhpur	23	8.5	38	31.1
Kalyani	—	—	18	25.4
Karnatak	42	8.2	92	27.2
Kerala	107	11.2	235	29.8

TABLE 7. AWARDS OF DIVISION I IN MASTER'S DEGREES IN ARTS AND SCIENCE BY UNIVERSITY—1965 AND 1966
(*continued*)

	M.A.		M.Sc.	
University	*No.*	*Percent*	*No.*	*Percent*
Kurushetra	30	14.1	46	43.8
Lucknow	97	8.7	85	24.4
Madras	91	10.4	219	23.2
Magadh	39	8.5	8	22.9
Marathwada	33	17.8	20	25.0
Mysore	28	10.0	58	28.2
Nagpur	49	4.4	84	29.8
North Bengal	2	2.1	8	15.7
Osmania	81	16.7	128	50.6
Patna	106	9.3	85	25.7
Poona	12	1.8	68	20.5
Punjab	173	5.5	194	57.7
Punjabi	28	12.4	49	58.3
Rajasthan	68	2.8	78	27.1
Ranchi	30	4.3	31	20.1
Ravi Shankar	12	1.4	34	31.2
Roorkee	—	—	33	55.0
Sardar Patel	15	9.3	38	27.7
Sangar	54	3.2	105	27.7
Shivaji	2	0.8	8	15.4
S.N.D.T. Women's	6	2.3	—	—
Sri Venkateswara	13	8.9	74	38.7
Udaipur	21	8.8	10	27.8
Utkal	57	7.5	106	39.8
Vikram	60	3.3	112	30.9
Visva-Bharati	14	11.4	29	76.3
Total	2,949	5.5	4,435	29.4

Source: "Gradings in University Degrees," *Technical Manpower,* Bulletin of the Division for Scientific and Technical Personnel, CSIR, March 1969.

CHAPTER VII

Major Issues and Trends in India and Its Educational System

POPULATION

> "India is a vast country with a population of about 510 million and 21 million children are born every year. It is estimated that in another 20 years, the population may be about 750 million and by the end of the century about 1000 million. Although with this growing population, food production and industrial output have also increased by 62 per cent and 150 per cent respectively, yet the national per capita income remains Rs. 250 [$33.33] per annum. The top 20 per cent of the population has an income of Rs. 35 p.m. [$4.67 per month] on the average, the lower 30 per cent of less than Rs. 15 [$2.00], and the lower-most 10 per cent of less than Rs. 10 [$1.33]. This population explosion with such pathetic per capita income can easily explain the educational crisis in India."

This was the introductory part of a paper, "The Educational Malaise: A Diagnosis," submitted to the International Conference on World Crisis in Education at Williamsburg, Virginia October 5 to 9, 1967 by Uday Shankar, Principal, College of Education, Kurushetra University (as reported in the Inter University Board *University News* March 1968).

Indeed, the evidence seems increasingly conclusive that the population explosion in India is a primary factor in most of that country's major issues or problems. For example, the following would seem to represent such items: high illiteracy rate of the general population; inadequate supply of food (especially protein); urbanization squalor; unemployment and underemployment; lack of universal education even at the primary level; overexpansion at the higher education level; and worsening standards in education (e.g., the inferior qualifications and status of teachers; the inadequate salary scale for teachers; "wastage and stagnation" of nearly incredible proportions; the erosion of the quality of English as a medium of instruction; the debilitating effect of the examination and evaluation system; and the establishment of new institutions without adequate staffs, libraries and other facilities and without appropriate enrollment levels). This chapter examines some of those issues and trends especially as they seem to relate to the quantity and quality of Indian applicants to various institutions in the United States and the applicants' attitudes today and in the future.

LITERACY AND LANGUAGE

The success stories of developed countries seem to have at least one common thread: a fairly high rate of literacy among the people that has facilitated the development of the human as well as the physical resources. According to the *Report of the Education Commission* 1964-66

> India was more illiterate in 1961 than in 1951, with an addition of about 36 million illiterates. In 1966, it has 20 million more illiterates than in 1961. . . Though the percentage of literacy has risen from 16.6 per cent in 1951 to 24 per cent in 1961 and 28.6 per cent in 1966, a faster growth of population has pushed the country further behind in its attempts to reach universal literacy.

Not only has the lack of universal education even in the primary stage played a large role in India's having over 140 million illiterates in its work force but as the above-cited *Report* also states:

> Moreover, the system of primary education continues to be largely ineffective and wasteful and many children who pass through it either do not attain functional literacy or lapse into illiteracy soon afterwards.

The efforts to improve the literacy rate certainly are not aided by the language problem. One of India's most emotion-provoking issues (climaxing at times in riots of anti-English or anti-Hindi mobs that have caused deaths and extensive property damage, it has been a cancer in the political and social as well as in the educational body of India. "The three-language formula" was approved by the Conference of Chief Ministers (executive heads of the Indian states) in 1961 as the solution to the language problem. Under that formula Indian students would study Hindi, English and another Indian language. The Education Commission's 1964-66 modification of this formula recommended:

1. Study of the mother tongue or regional language (at the option of the student) at the lower-primary level (Classes I-IV).

2. Study on a compulsory basis of two languages at the higher primary level (Classes V-VII): the mother tongue or regional language; and the "official" or "associate official" language of the Union (that is, Hindi and English).

3. Study, again on a compulsory basis of three languages at the lower secondary stage (Classes VIII-X). Here the student would have to study either the official or associate official language not elected in higher primary school.

4. Study on a compulsory basis of two languages at the highest secondary level (Classes XI-XII): any two of the three languages studied earlier or a combination of any two of the following: a modern Indian language; a modern foreign language; and a classical language, Indian or foreign.

5. No compulsory study of a language at the higher education stage.

Quite a challenging proposal for any country! The evidence is clear that the trend is away from English as the medium of instruction and examination. This is true even in the B. A., B. Com., M. A. and M. Com. courses of study. Where English continues to be the medium, its quality is deteriorating alarmingly. *The Study of English in India* report in 1967 by a study group appointed by the Ministry of Education called strong attention to that fact and complained: "A vicious circle has established itself in these matters—the younger lecturers being almost as incorrect in their use of English as the pupils themselves." All-India institutions face increasing difficulty in coping with students for whom English is a second, if not a third, language.

FOOD

Authorities disagree on the extent to which India has been successful in combating the shortage of food, at least in terms of quantity (calories) but also in terms of quality (notably protein). Writing in the August 15, 1967 issue of *Link,* Sulekh C. Gupta questions whether the agricultural revolution has kept pace with the population explosion, citing statistics that show a 1.19% compound annual rate of growth for all cereal crops (so central to the Indian diet) from 1957 to 1967 while the rate of population growth was 2.34% per year. That authority further argues that "the threshold of an era of plenty in foodgrains" neither has arrived nor will it arrive for some time. In his contribution to the book, *Understanding Science and Technology in India and Pakistan,* W. Parker Mauldin brings an important aspect of this problem into clear focus when he states:

> The maintenance of existing poverty even with much larger populations is not an acceptable goal. It will not do to talk of finding food to nourish tomorrow's children as badly as today's are fed.

One Indian expert in 1967 stated that the average Indian citizen's daily diet contained 1090 calories as compared to the minimum of 2500 calories needed for routine work. *Famine - 1975!* by the Paddock Brothers calls India "the first of the hungry nations to stand at the brink of famine and disaster" and predicts dire consequences. Georg Borgstrom's *The Hungry Planet* describes India's plight in much the same vein. On the other hand, there are experts who feel that India already has reached the point of self-sufficiency at least in the production of cereal grains. That protein-related malnutrition has exacted a heavy toll not only in the physical development of India's youth but also, and more tragically, in their mental development during childhood seems widely accepted however.

URBANIZATION SQUALOR

As generally is the case in a developing country as it seeks to introduce techniques of mass production in agriculture and to expand its industrial and commercial base, large masses of people either are forced to leave the rural sector and/or are attracted to the urban centers by hopes of greater income and modern appurtenances. As has been indicated earlier India still is predominantly a rural society; yet its growing urban population now numbers over 100 million. Calcutta with its some 7.5 million people (and likely to be 15 million by 1990) has been characterized as "the world's worst urban sore" in a June 23, 1969 article, "If You Think America Has Slums . . ." of the *U. S. News and World Report.* While Calcutta's problems of population density, inadequate sanitation facilities, squalor of slums, unemployment and malnutrition perhaps are the worst of any Indian city, others face nearly as great a challenge as the migration from the land to the city accelerates.

UNEMPLOYMENT/UNDERPLOYMENT/BRAIN DRAIN

Much of India's unemployment is implied in the problems of urbanization just described. In Calcutta alone it is estimated that over a million of the work force have no regular jobs. Appalling as that unemployment is, the unemployment and underemployment of many educated Indians is more unexpected in many ways. For it is quite unique for a developing country to have thousands of educated unemployed and underemployed. Among the "graduate engineers," those with degrees in engineering and technology, the unemployment rate has been estimated by the Institute of Applied Manpower Research to be 20 per cent. Another authority in 1968 claimed that 75,000 out of 93,000 engineers in India were unemployed. A study of the 1966 and 1968 engineering graduates of Roorkee University (one of India's better engineering and technological institutions) revealed that in October 1967 43.2% were employed, 41.3% were unemployed and 15.1% were in higher education. Six months after graduation 76% of the 1967 graduates were unemployed. In the survey a large number of graduate engineers were found to be holding jobs meant for diploma holders and therefore might be considered underemployed.

George B. Baldwin in his article, "Brain Drain or Overflow?" in the January 1970 issue of *Foreign Affairs* predicts: "Over the next few years unemployment among educated Indians, including those in science, technology and medicine, is expected to rise, not fall." He also cites estimates that perhaps 5-10% of India's high-level manpower has been diverted abroad either on a permanent or temporary basis but adds: "Indeed, government officials have more than once said that they hoped that educated Indians in large numbers would *not* return, since the country has no way of putting them to work." Efforts have been made to lessen the "brain drain" (or "overflow," as one may prefer to view the phenomenon). The National Register Unit of the Indian Council of Scientific and Industrial Research has maintained a roster of Indian scientific and technical personnel abroad which is published regularly in part to alert Indian agencies and other employers to the possible availability of such talent. With assistance from the Ford Foundation ASSIST (Association for Service to Indian Scholars and Technicians) has been a project for the placement of Indian nationals educated or trained abroad. Its activities have included assistance to employers in India in the locating of qualified personnel, placement service for Indian nationals working or studying abroad and dissemination of information and vocational guidance to Indians at the time they go abroad to study. In February 1970 the Government of India initiated a requirement that any physician seeking to travel abroad for advanced medical research must post a bond equivalent of $6000 to be forfeited if he does not return to India. The "Scientists' Pool Programme was launched by the Council of Scientific and Industrial Research several years ago to provide temporary placement for highly qualified scientists, technologists, engineers and doctors (especially but not exclusively those returning from abroad). Such a person while in the Pool is attached to an appropriate organization in India and paid by the CSIR. By December 1967 a total of 5400 had been in the Scientists' Pool and about 2500 of those had secured regular employment. Ashok Parthasarathi writing in the *Exchange* Summer 1967 issue expresses the point of view that, while the quantity of the brain drain (perhaps 8000 of India's estimated 600,000 high-level scientific, technological and medical manpower is abroad) might not be a matter of concern:

> Since more of India's most talented young men and women are going abroad today than even five years ago and since a greater proportion of them are choosing to remain, there is a steady increase in the drain.

Supportive of this point of view is such evidence as the "Report of A Survey of Graduates of Indian Institutes of Technology in India and Abroad" in *University News* June 1968. That survey revealed that 84.6% of the first divisioners that were graduated from the prestigious Indian Institutes of Technology between 1961 and 1965 were found to be abroad (usually in the United States). Those interested in pursuing this "brain drain" or "overflow" issue further may find one or more of the entries in the Bibliography valuable in that regard.

OVEREXPANSION IN HIGHER EDUCATION

The relative overexpansion of higher education is another issue or problem in India's development. In engineering and technology, partly because of development goals of the Five-Year Plans and partly because of the technical demands of the wars with China and Pakistan, the number of institutions and the number of seats or enrollment for degrees and diplomas were increased during the 1960's beyond India's current ability to absorb their "outturn." Enrollment in higher education as a whole has increased nearly sevenfold since Independence whereas primary and secondary education enrollment only has risen about fourfold. Considering the wastage and stagnation at the primary and secondary levels, this imbalance in enrollment growth is even more pronounced. The related growth in the number of universities and of the affiliated and constituent colleges has had its effect on the quality of India's higher education as well as in the quantity of graduates. As the Report of the *Education Commission 1964-66* reports, nearly 60% of the affiliated colleges in 1964-65 had fewer than 500 students which that Commission felt to be "the very minimum below which a college may tend to be uneconomic and inefficient . . ." The quantity and quality of the faculty, the libraries, the laboratory facilities, textbooks (in regional languages and in English), and other elements of the educational process amid such a rate of expansion—which greatly has outstripped the rate of increased financing—are all part of "the educational malaise" to which Professor Shankar's paper (cited earlier in the chapter). addressed itself.

Why has not a system of selective admission been adopted within Indian higher education to limit its growth? The Education Commission in its 1964-65 *Report* indeed advocated the "linkage" of total enrollments in higher education to the manpower needs of the country and "to bridge the gap between these enrollments and the demand for higher education by adopting a system of selective admissions." Yet efforts to restrict enrollment in the engineering and technological fields have met strong opposition and such attempts to restrict the growth of higher education in general seem likely to continue to be politically difficult, if not impossible. In fact, if the Education Commission's recommendations to equalize the educational opportunity of the backward and underprivileged classes and individuals were to be adopted, one likely result would be renewed pressures to expand education at all levels including higher education.

TEACHER QUANTITY, QUALITY AND STATUS

In all of this under-financed expansion the quantity, quality and status of the teacher within the Indian educational system have been affected adversely. Earlier chapters of this volume have mentioned the lack of minimally qualified teachers in adequate numbers at the different educational levels. The failure of teacher salaries to keep pace with the inflating costs of living has affected the recruitment and retention of teachers and their status within the Indian society. For example, the *Education Commission Report* 1964-66 shows that the teachers in colleges of arts and sciences with an average annual salary in 1965-66 of Rs. 4000 (about $890) had a real income only 90% of the level they had in 1950-51. Inflation since 1965 undoubtedly has worsened the situation still further.

WASTAGE AND STAGNATION

"Wastage" in Indian education refers to the attrition or withdrawal of a student before completing the last grade or year of the educational level in which he is enrolled. "Stagnation," also called "retardation," is the retention of a student in a given grade or class for more than one year because of unsatisfactory performance. Earlier chapters have cited examples of high rates of wastage or attrition at different levels. Dr. Benjamin Bloom of the University of Chicago observes in *Evaluation in Higher Education* published by the University Grants Commission:

> It is hard to understand how an educational system can function effectively if its failure rate is so high. One would look to the cause of such failure (a) in the selection or admission procedures of the Universities, (b) in the types of learning experiences provided by the Universities and (c) in the type of examinations used to determine success and failure.

Because of wastage and stagnation perhaps only one out of every 10 Indian students that enrolls in Class I will be graduated even with a Division II first degree some fourteen years later.

EXAMINATION AND EVALUATION

If the Indian educational system resulted in the most able 2% of its students being enrolled in higher education, "India would have the most capable University students of any of the highly developed nations of the world" states Dr. Bloom in the volume referenced above. This author shares Dr. Bloom's apparent conviction that such is not the case because the wastage and stagnation is so related to the examination system. Several other of his observations should be of considerable interest to the United States admissions officer:

> The combination of low reliability in the sample of questions used and high subjectivity in marking procedures is such as to give great weight to chance and whim in determining an individual's fate. . . The comparison of papers over several years reveals a highly stereotyped character to the question. Originality in setting questions is not highly prized. The amount paid for setting questions suggests that it is not expected the question paper setter will work for many days on this task . . . However, the effect of the syllabus (which does not seek to correct misconception about what learning is to take place) and the pressure of time and numbers of students makes information on each topic the major purpose of instruction for the teacher, the major objective emphasized by the examiner, and the cramming of such information the major task undertaken by the student. . . In some of the syllabi the references cited were relatively ancient, even in fields which have changed markedly in the past two decades. It is evident that syllabi are not changed rapidly enough to keep pace with the significant changes taking place in the subject fields. . . The external examinations have been a powerful force in the Indian educational system for insuring minimum standards. They have enabled the Universities to expand greatly while still maintaining some minimum requirements. Any programme of change must recognize the force of these examinations and find some way of improving rather than eliminating them. They are so intricately interwoven with the educational and social pattern that change must be a gradual one rather than a sudden substitution of one system of examination for another . . .

The use of internal assessments by the teachers as part of the determination of final marks is perhaps the most common improvement advocated by observers of the Indian scene. Yet attempts to allow even as little as 20-30% weightage for internal assessments in final marks for a given year have not been notably successful for a variety of reasons.

How does the United States admissions officer treat the results of Indian examinations in light of the deficiencies just described? The *Education Commission Report* in its recommendations for admission within Indian Higher education perhaps has the answer:

> The common practice at present is to use examination marks rigidly as the sole criterion of merit and as the basis for selection [for higher education in India]. There is however little academic justification for it. Examination marks are notoriously unreliable for measuring attainment. Their prognostic value for determining the ability to profit from higher education is even more limited and several studies have shown that the correlation between school leaving examination marks and success in college is not significant. Not many problems arise, however, at the extreme ends of the scale and it is easy to select a first or high school class student for admission or to reject one who has just scraped through the examination. But as one approaches the border-line of eligibility, the examination marks cease to serve as a reliable guide. . . It would be desirable that, in selecting students for admission, the institution should take into consideration the examination marks, the school record, the proficiency of the student in fields not tested in the examination, and such other relevant factors. . .

Chapters VIII and IX describe other factors that may be combined in the United States admission process with examination results especially when the latter are not "at the extreme ends of the scale."

STUDENT UNREST

Problems of student unrest in India—as in many countries today—are the subject of concern within and without the universities. In listing some of the causes for the "many ugly strikes and demonstrations," the Education Commission has concluded:

> The uncertain future facing educated young men. . .; the mechanical and unsatisfactory nature of many curricular programmes; the totally inadequate facilities for teaching and learning in the large bulk of institutions; the poor student-teacher contact . . . ; the inefficiency and lack of scholarship on the part of many teachers and their failure to interest themselves in the students' problems . . .

Part of the solution recommended by the Education Commission is the provision of student sources such as orientation, health sources, guidance and counseling, vocational placement, residential facilities, student activities and financial aid. Efforts of the United States Educational Foundation in India (USEFI) to disseminate information on student personnel practices and to encourage their development wherever possible in Indian colleges have been noteworthy. The impact of this program is limited because of USEFI budget restrictions and the slow acceptance of and commitment to the concept of student services by Indian educators even though the University Grants Commission also has sought to stimulate this area by means of development grants to Indian institutions. Regardless of its causes, student unrest, or "indiscipline" as it often is called in India, has played a large role in numerous strikes that have closed colleges and even universities for weeks and even months in recent years; in the language riots both in the north and in the south; and in the pressure for a large percentage of passes on annual examinations even for quite marginal student performance.

QUALITY OF INDIAN STUDENTS IN THE UNITED STATES

In preparing this chapter the author has hesitated to pen such a pessimistic story of current Indian problems especially in higher education. However, his own observations seem well buttressed not only by the authorities cited in the preceding text but also by others. *Higher Education in India,* edited by A. B. Shah, is "a symposium that defines the major problems of higher education in contemporary India and suggests radical and constructive solution to them"; its conclusions about "the depth of the crisis in higher education in India" parallel those presented here. Similarly *College Education in India,* edited by J. W. Airan, represents another collective report on the various problems of higher education that would seem to be supportive of the points of view expressed in this chapter.

One might infer from all of the preceding discussion of the forces acting on the Indian student today and likely to be impinging on him for some time to come that his performance in study in the United States would be far from sterling. Yet even such a pessimistic observer as Joseph Lelyveld in his article, "India's Students Demands—A Safe Job in the Establishment" that appeared in the May 12, 1968 *The New York Times Magazine,* has concluded:

> At a generous estimate, perhaps a 5 per cent of the mass of Indian students in institutions of higher education are receiving decent training by recognizable world standards. The best of these (plus those with the best connections) generally go on to study abroad . . .

Five per cent of India's nearly 2 million enrollment in higher education would mean nearly 100,000 students. That total in turn would represent about nine times the current Indian student population in the United States and about thirty times the annual United States intake of new Indian students. The United States admissions officer who identifies and selects from that five per cent is likely to secure a most capable student. While Werner Warmbrunn and Catherine Spalter in their unpublished study reported in the *NAFSA Studies and Papers Research Series Number* 4, November 1962, claimed that more than one out of five students from India in one United States university's foreign student population failed and because of inadequacy of previous training, Robert Vold and Pasupati Mukerjee in their article, "Correlation of Indian Training with American School Requirements," *Journal of Chemical Education* December 1969, have contended that the records of Indian predoctoral candidates support the thesis that

> Carefully selected Indian applicants with superior records are likely to be successful also in graduate work in the United States, despite the differences in the academic system in the two countries.

Still another research study conducted by Mark L. Piesch revealed that the Indian graduate student in twenty-two graduate schools typically was a successful student in those schools where his Indian record had been at least Division II in quality. Of interest may be the fact that in that study the United States performance of Division I and High II degree holders in the pure sciences and engineering did not differ to any statistically significant degree and the United States performance of Division II degree holders in the humanities and social sciences was even higher than that of Division I ones. In her studies published in the *College and University* Fall 1967 and Fall 1969 issues Sari C. Halasz has reported that the students with Indian master's degrees and otherwise carefully selected at one major United States university have been succeeding in graduate study in commendable percentages.

Keshav Dev Sharma in his 1965-66 study of over 1400 Indian students in the United States (as reported in *Exchange* Spring 1969) found over 86 per cent of those students to have either "top-rated or high-above-average grade point averages," 7 per cent average and very few below average.

Studies conducted in Great Britain and Canada likewise have shown that the carefully selected Indian student tends to be at least as, if not more, successful in his overseas study as other foreign students.

CHAPTER VIII

Guidelines and Suggestions for Admissions Officers

INTRODUCTION

In a real sense this chapter may represent a "first" in the *World Education Series,* for it is a chapter that is neither the strictly factual presentation of information and data on the subject country (as in the preceding chapter) nor is it the author's admission and placement recommendations as approved by the Council on the Evaluation of Foreign Student Credentials. Rather, this chapter is an attempt by the author to share with other admissions officers certain guidelines and suggestions that are based on his Indian experience, that he believes may be useful but that may represent, in many cases, a more personal point of view that not all admissions officers may wish to accept.

ATTESTED CREDENTIALS

The Indian applicant would find it most difficult, if not impossible, to furnish the type of transcript of record required by United States institutions from its American applicants. After each examination the Indian student is issued the original of any certificate or diploma earned by successful completion of that examination and the original of the mark sheets related to that examination. Thereafter the Indian student is expected to use those originals, or copies attested by a "gazetted official," for any educational purpose, employment and other requirements without further reference to the issuing agency or institution's records. For that reason, Indian college principals, university registrars, secondary school certificate examination board secretaries and the like are not geared to furnish certified duplicates to United States institutions with any reasonable dispatch. Photostating facilities are scarce in India and copies are very expensive. A United States requirement for photostatic copies of credentials certified by the original issuing institution or agency generally would cost the Indian applicant more than the equivalent of the Indian per capita annual income as well as days, if not weeks, of effort in securing the photographs themselves and then the signatures of the board secretary, the college principal, and/or the university registrar.

The acceptance of attested copies of Indian credentials, in the opinion of the author and of countless other United States admissions officers, is an acceptable and perhaps the only practical approach to this matter. Institutions seeking further security against possible forgeries and alterations of documents may wish to require that the Indian student bring the originals of his credentials with him to the United States so that the attested copies used in the admission process may be compared with the originals before the first United States registration occurs.

INTERPRETATION OF MARKS SHEETS

Any discussion of the most appropriate interpretation of marks sheets for United States admissions purposes is complicated by the variety of formats for such marks sheets throughout India and by the variety of ways in which the marks are recorded and weighed in the awarding of class or division. A brief explanation may be useful, especially for the newer United States admission officer. For this purpose a relatively simple Secondary School Certificate Examination marks sheet and a rather complicated Third B. Sc. Examination marks sheet have been chosen to give some indication of the range of complexity in Indian marks sheets and yet to illustrate the basic approach to the interpretation of marks sheets.

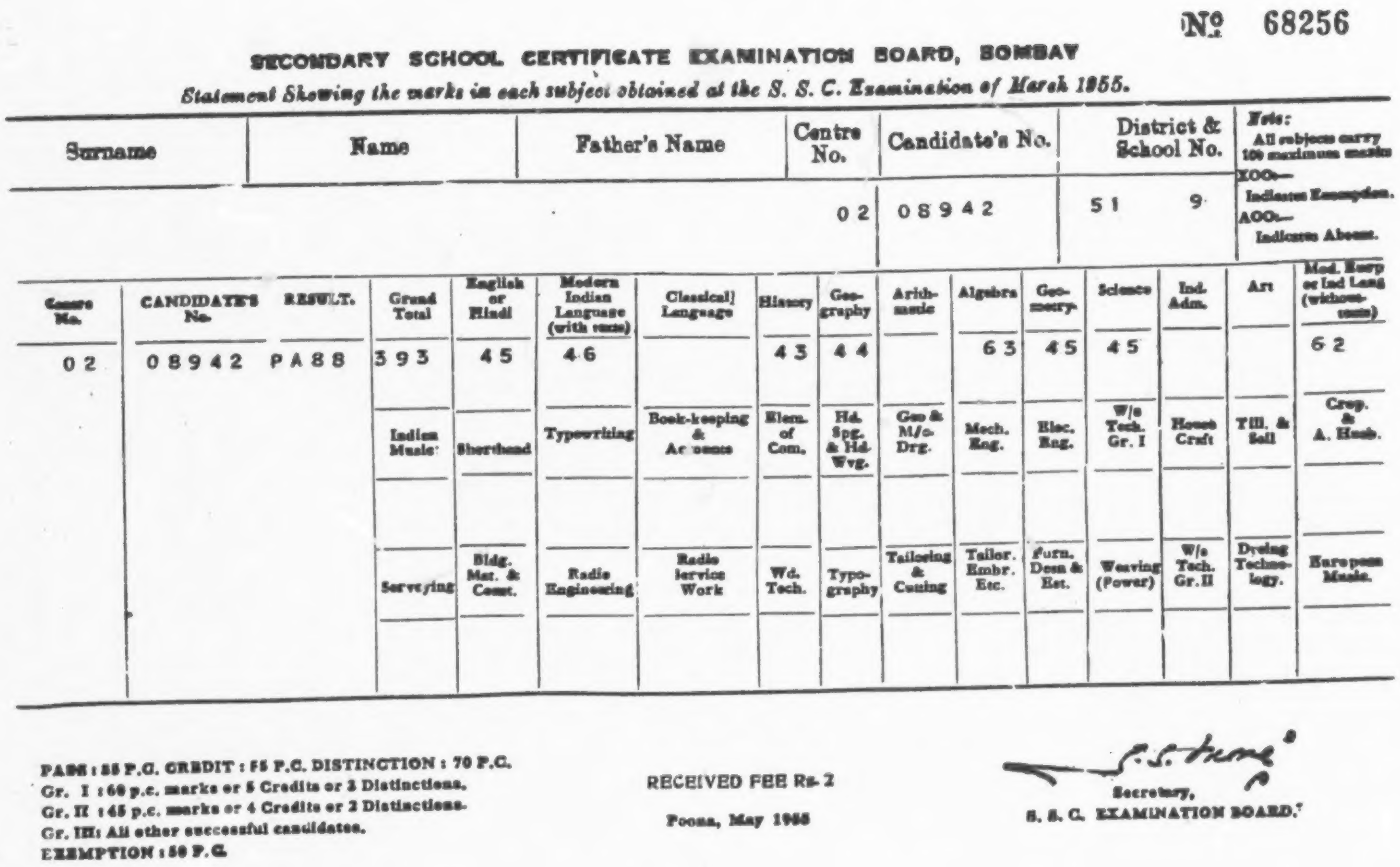
Pictured on page 110 is a Secondary School Certificate Examination Board, Bombay marks sheet and the related Secondary School Certificate. Some salient features especially of that marks sheet but also of the related certificate follow:

1. Each subject carried 100 maximum marks (see legend in upper right portion of marks sheet).
2. The student sat for eight subjects: English or Hindi; Modern Indian Language (with texts); History; Geography; Algebra; Geometry; Science; and Modern European or Indian Language (without texts). Hence his maximum marks possible on this examination would have been 800.
3. He earned 45 out of the 100 maximum on the first subject (45% of possible marks); 46 out of 100 on the second subject (46% of possible marks); 43 on the third; 44 on the fourth; etc.

4. His Grand total of marks was 393. His percentage of total possible marks (800) was 49.1%.
5. According to the legend in the lower left corner of the marks sheet a "Pass" in a given subject requires 35% of total marks or higher; a Credit pass, 55%; and a Distinction pass, 70%. His performance in the eight subjects earned him six Passes and two Credits.
6. Had he been eligible for "exemption" from required parts of the examination (because earlier examining in those parts with results of at least 50% of possible marks), the symbols "XOO" would have appeared in the box for those required parts. Similarly, if he was absent for part(s) of the examination, the symbols "AOO" would have appeared in the appropriate boxes.
7. The Secondary School Certificate shows that "Grade Two" was awarded to this student. The legends at the bottom of both the certificate and the marks sheet provide that Grade II is awarded to those who obtain at least 45% of marks in the aggregate or four credits or two distinctions. Since this candidate had 49.1% of marks in the aggregate but not the 60% required for Grade I, he was awarded the Grade II.
8. It should be noted that, whereas the marks sheet refers to "English or Hindi" as one of the subjects, the certificate shows "Gen. English." Similarly the "Modern Indian Language (with texts)" on the Marks sheet is "Addl English" (Additional English) on the certificate; "Modern European Indian Language (without texts)" is French; and "Science" is Physiology and Hygiene.

On page 113 is shown a Gujarat University Statement of Marks for the third B. Sc. Examination which represents one of the most complicated of Indian marks sheets. Some significant aspects of that credential (encircled numbers have been used to key the text to the marks sheet) are:

1. First of all, it really is more than just a marks sheet for the third B. Sc. Examination or third year, for it includes certain allowances for the preceding two years of study and examination and sets the basis for the class or division of degree to be awarded.
2. The "Grand total" (1) of 533 shown on the right side of the marks sheet represents a total of the 402 "Grand Total for the



№ 68256

SECONDARY SCHOOL CERTIFICATE EXAMINATION BOARD, BOMBAY

Statement Showing the marks in each subject obtained at the S. S. C. Examination of March 1955.

Surname	Name	Father's Name	Centre No.	Candidate's No.	District & School No.	*Note:* All subjects carry 100 maximum marks
			02	08942	51 9	XOO.— Indicates Exemption. AOO.— Indicates Absent.

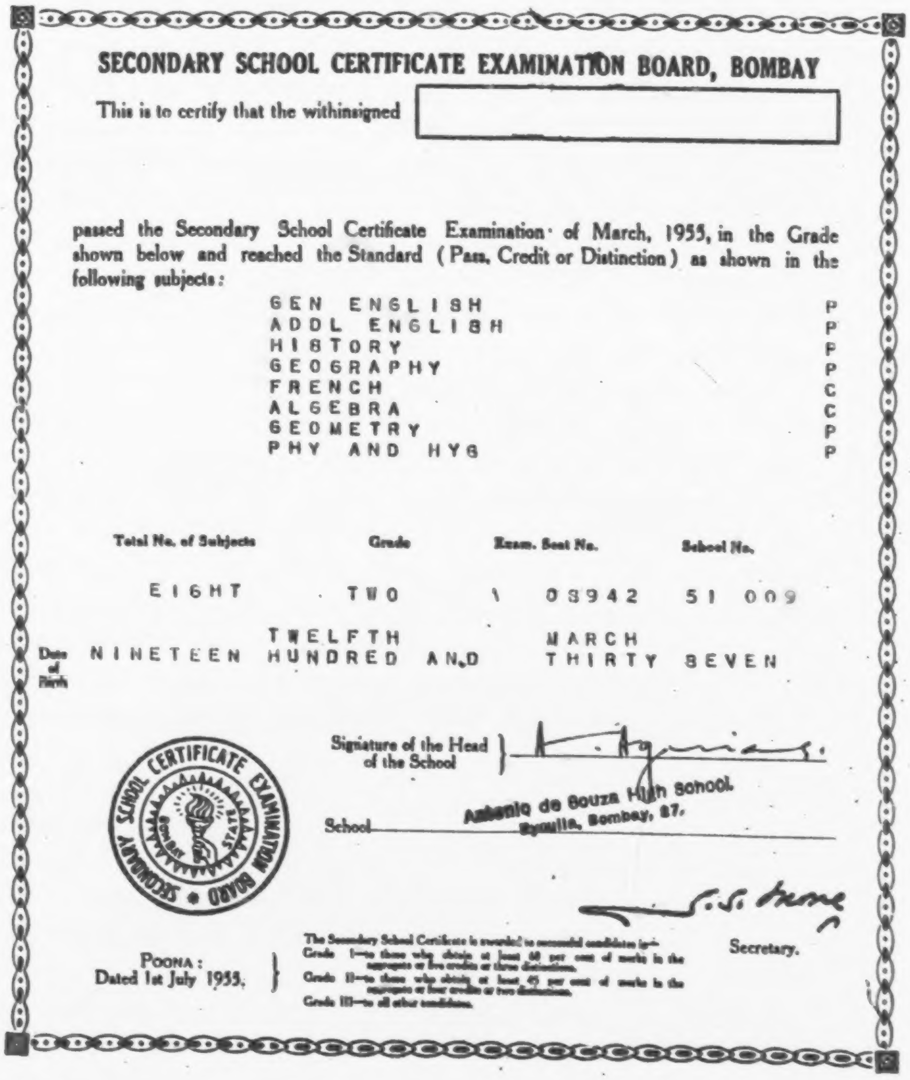
Centre No.	CANDIDATE'S No.	RESULT.	Grand Total	English or Hindi	Modern Indian Language (with texts)	Classical Language	History	Geography	Arithmetic	Algebra	Geometry	Science	Ind. Adm.	Art	Mod. Europ or Ind Lang (without texts)
02	08942	PASS	393	45	46		43	44		63	45	45			62
			Indian Music	Shorthand	Typewriting	Book-keeping & Accounts	Elem. of Com.	Hd. Spg. & Hd. Wvg.	Geo & M/c. Drg.	Mech. Eng.	Elec. Eng.	W/s Tech. Gr. I	House Craft	Till. & Soil	Crop. & A. Husb.
			Surveying	Bldg. Mat. & Const.	Radio Engineering	Radio Service Work	Wd. Tech.	Typography	Tailoring & Cutting	Tailor. Embr. Etc.	Furn. Desn & Est.	Weaving (Power)	W/s Tech. Gr. II	Dyeing Technology.	European Music.

PASS : 35 P.C. CREDIT : 55 P.C. DISTINCTION : 70 P.C.
Gr. I : 60 p.c. marks or 5 Credits or 3 Distinctions.
Gr. II : 45 p.c. marks or 4 Credits or 2 Distinctions.
Gr. III: All other successful candidates.
EXEMPTION : 50 P.C.

RECEIVED FEE Rs. 2

Poona, May 1955

Secretary,
S. S. C. EXAMINATION BOARD.



SECONDARY SCHOOL CERTIFICATE EXAMINATION BOARD, BOMBAY

This is to certify that the withinsigned

passed the Secondary School Certificate Examination of March, 1955, in the Grade shown below and reached the Standard (Pass, Credit or Distinction) as shown in the following subjects:

GEN ENGLISH	P
ADDL ENGLISH	P
HISTORY	P
GEOGRAPHY	P
FRENCH	C
ALGEBRA	C
GEOMETRY	P
PHY AND HYG	P

Total No. of Subjects	Grade	Exam. Seat No.	School No.
EIGHT	TWO	03942	51 009

Date of Birth: TWELFTH MARCH NINETEEN HUNDRED AND THIRTY SEVEN

Signature of the Head of the School

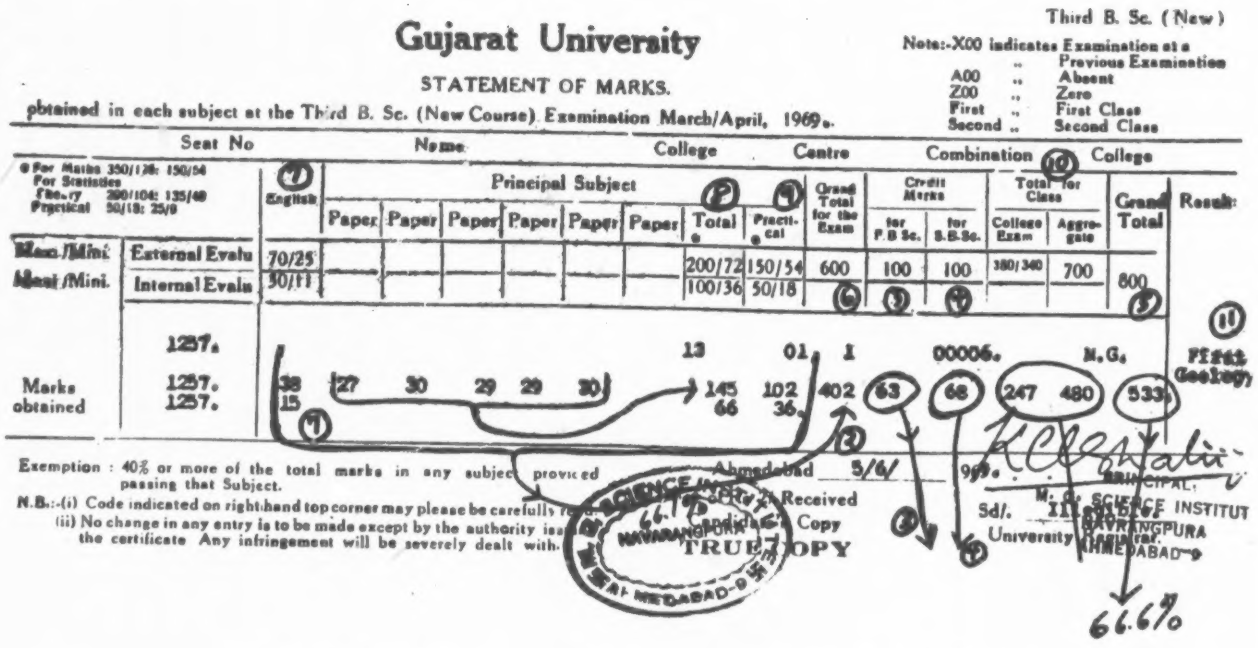
School Antonio de Souza High School. Byculla, Bombay, 27.

Secretary.

POONA:
Dated 1st July 1955.

Exam" (2) (which is the Third B. Sc. Year Exam awarded total); 63 "Credit Marks for F. B. Sc." (3) (which represents the percentage of total marks earned on the First B. Sc. Year Examination); and 68 "Credit Marks for S. B. Sc." (4) (which represents the percentage of total marks earned on the Second B. Sc. Year Examination). Here it should be stressed that of the 800 (5) maximum Grand Total for the three years, the first two years account for only 200 (100 each) which means that the Third Year examination is weighed *six* times more heavily in the Grand Total than each of the first two years.

3. The "Grand Total for the Exam" (6)—600—is the maximum total of marks for external evaluation (i.e., the university-set and graded examination) and for the internal evaluation (i.e., the college mid-year examination, teacher evaluation and/or other assessment within the college attended by the candidate) in each subject. For example, in "English" (shown on the left side of the marks sheet) (7) the maximum allowed and the minimum marks required for English are shown as 70 and 25 respectively for the External Evaluation and 30 and 11 respectively for the Internal Evaluation. This candidate earned 38 marks on the external and 15 on the internal evaluation in English for a total of 53 marks or 53% of the maximum 100 possible. The "Total" reading for the "Principal Subject" (8) (in this case, Geology) provides for a maximum of 200 marks (72 minimum) on the External Evaluation and a maximum 100 (36 minimum) on the Internal; this candidate achieved 145 marks and 66 marks respectively on the External and Internal Evaluation on the Principal Subject for a total of 211 out of a possible or maximum 300 (70.3%). Similarly on the Practical (9) he scored 102 marks and 36 marks on the External and Internal Evaluations respectively for a total of 138 marks out of the maximum 200 (69%).
4. The "Total for Class" data (on the right side of the marks sheet) (10) was for use within his college and did not enter into the calculations leading to the Grand Total and hence did not affect the class or division of "First" that was awarded as the "Result" (as shown on the extreme right of the marks sheet). (11)



Third B. Sc. (New)

Note:-X00 indicates Examination at a
.. Previous Examination
A00 .. Absent
Z00 .. Zero
First .. First Class
Second .. Second Class

Gujarat University

STATEMENT OF MARKS.

obtained in each subject at the Third B. Sc. (New Course) Examination March/April, 1969.

Seat No Name College Centre Combination ⑩ College

@ For Maths 350/126: 150/54
For Statistics
Theory 200/104: 135/48
Practical 50/18: 25/9

		⑦ English	Principal Subject Paper	Paper	Paper	Paper	Paper	Paper	⑧ Total @	⑨ Practical @	Grand Total for the Exam	Credit Marks for P.B Sc.	Credit Marks for S.B.Sc.	Total for Class College Exam	Total for Class Aggregate	Grand Total	Result
Max./Mini.	External Evalu	70/25							200/72	150/54	600	100	100	380/340	700	800	
Max./Mini.	Internal Evalu	30/11							100/36	50/18	⑥	③	④			⑤	⑪
	1257.								13	01,	1			00006.		N.G.	First Geology
Marks obtained	1257.	38	27	30	29	29	30		145	102	402	63	68	247	480	533	
	1257.	15 ⑦							66	36.	②						

Exemption : 40% or more of the total marks in any subject provided passing that Subject.

N.B.:-(i) Code indicated on righthand top corner may please be carefully read.
(ii) No change in any entry is to be made except by the authority issuing the certificate Any infringement will be severely dealt with.

Ahmedabad 5/6/ 969.

Received Candidate's Copy

TRUE COPY

66.7%

② ④

Sd/. Illegible
University Registrar.

PRINCIPAL.
M. G. SCIENCE INSTITUT
NAVRANGPURA
AHMEDABAD-9

66.6%

Grand total possible	800
Allowed for first and second year examination	200
Maximum marks possible for third year	600

Percent of total marks obtained for first and second year examinations.

These figures are for use within the college only. They are not part of the grand total of the examination(s) results.

DIVISION OR CLASS

One of the most perplexing problems in the evaluation of Indian credentials is matter of division or class. What does Division II mean in Indian terms as well as in United States? The information in Chapter VI (Higher Education) and in Appendix H (Indian University Examination Results) should be valuable in determining the meaning.

For example, many United States institutions consider only Division I applicants for admission. What implications does a policy have? Based on the 1965 Annual Examinations 1% of the B. A., 13% of the B. Sc. and 1% of the B. Com. degree recipients would be eligible for admission. Among the M. A., M. Sc. and M. Com. recipients 5%, 30% and 5% respectively would qualify by virtue of Division I records. Looking at differences on the percentages of divisions awarded within different subject fields, one finds that in 1965, 44% of the Geology, 35% of the Physics, 31% of the Chemistry and 30% of the Mathematics masters degree awards were at the Division I level, the percentage in Economics was 2%; History 2%; Sociology, 2% and English, less than 1%. The need to differentiate is perhaps sufficiently spotlighted by mentioning that in one Indian university in 1965 only 2 of the 856 M. A. degrees awarded in Economics were Division I and none of the 40 M. A. degrees in English were Division I.

SYLLABI

In Chapter IX, one of the recommendations is that the Indian applicant be asked to furnish a syllabus, course sheet, university catalog or statement by the applicant himself on the content of each subject covered in each examination he has taken. Such a document can be especially valuable in such subjects as mathematics and the sciences and can assist in identifying any deficiencies in content in the social sciences. The awarding of any transfer credit is facilitated greatly by such a credential.

Appendix J contains samples of Indian syllabi, and Appendix M includes a sample of the form that has been used by the U.S. Educational Foundation in India for this purpose in its Interviewing and Evaluation Service.

USE OF THE APPENDICES

An effort has been made to collect in the Appendices of this volume information and data not readily available to United States admissions officers but deemed essential to the effective utilization of the Admission and Placement Recommendations in Chapter IX. While certain of the Appendices are quite self-explanatory and their use for the admissions officer quite obvious, others need some clarification and explanation and perhaps all deserve to have their key features pointed out.

Appendices A, B and C present fairly detailed information for three different categories of major Indian institutions. Included in that descriptive data is such key information as: the name and enrollment of each institution; the year of establishment; and their constituent and affiliated colleges and the level of courses of study taught in each.

Appendix D lists the Centres of Advanced Study as designated by the University Grants Commission. Appendix E is a compilation of Research Institutions and their relationship to Indian universities for advanced degree research. Appendix F identifies the many institutions that offer post-secondary training that is not under the purview of the universities (i.e., various diploma and certificate training that often presents evaluation problems for United States institutions). The programs of study and the diploma and certificates of the polytechnics, technical schools and rural institutes often present substantial evaluation problems to United States institutions and agencies at all levels. Appendix G contains a list of such Indian institutions which supplements their description in Chapters V and VI.

In Appendix H Indian university examination results have been presented for use in comparing Indian universities and different degrees or subject fields and thereby assessing the value of any given Indian degree and division or class more soundly than has been generally possible heretofore for most United States admissions officers.

Because of the need to use abbreviations and initials as well as titles extensively throughout the Appendices in referring to certificates, diplomas and degrees, Appendix I contains a rather extensive list of those abbreviations, initials and titles. Sample syllabi, schemes of examinations and teaching schedules for a better understanding of the scope of certain Indian educational programs comprise Appendix J. The samples of selected Indian credentials in Appendix K are particularly for the admissions officer who has had limited exposure to such credentials.

The Government of India Press Note in Appendix L should give the United States admissions officer a better understanding of the currency exchange situation as it applies to the Indian student seeking to study abroad. Appendix M contains samples of forms that should be of interest to those concerned with the evaluation of Indian credentials.

EQUIVALENCY OF CERTIFICATES

In Section B of Chapter IX the equivalency of various certificates is depicted by the groupings recommended as the equivalent of various United States educational levels. At this point it might be pointed out that these equivalencies also are accepted within India. For example the Orissa University of Agriculture and Technology *Regulations and Courses* lists these certificates as equivalent for admission purposes: the High School Certificate (H.S.C.); the Secondary School Leaving Certificate (S.S.L.C.); the Matriculation Certificate; and the Junior Cambridge Certificate. It also lists as equivalent at the next highest level: the Pre-University Examination; and the Higher Secondary School Certificate Examination. In their February 1968 newspaper announcement of the annual admissions testing, the Indian Institutes of Technology cited these certificates as equivalent: the Pre-University; the Senior Cambridge; the Indian School Certificate; the Higher Secondary School Certificate; the Pre-Degree Certificate; and the General Certificate of Education (Advanced and Ordinary Levels); the University of Delhi agrees in its admissions practices with the IIT's in this regard.

AVAILABILITY OF UNITED STATES TESTING

United States institutions that require certain admission testing of their applicants as well as those that require or strongly recommend the TOEFL may wonder about the extent to which such testing is available in India. Of course, the annual bulletins and registration materials for those tests list the overseas testing centers including India. The question that might remain in the minds of many United States admissions officers after perusing those lists is: "How available are these centers to the typical Indian applicant?"

The answer to that question is that the Indian testing centers are increasingly available to the Indian applicant. As the volume of United

States testing has grown in India, additional regular testing centers have been established (in addition to the special centers generally set up where the testing candidate is over 75 miles from a regular center). In 1970-71 for example, the Graduate Record Examinations (GRE) were scheduled in regular testing centers in twenty-six cities including virtually all of the state capitals. The Test of English as a Foreign Language (TOEFL) was to be held in nearly forty cities, again including virtually all of the state capitals in India. In the case of the Admission Test for Graduate Study in Business (ATGSB) it was to be administered in fewer cities but in ones well distributed throughout India.

WORLD EDUCATION SERIES INDIA 1964

Because of space considerations, this present volume on India is concentrated in its detailed coverage of Indian education on the more current scene. For that reason United States admission officers encountering applications from older Indian students should find the 1964 World Education Series volume on India by Frances M. Willard a valuable reference.

UNITED STATES EDUCATIONAL FOUNDATION IN INDIA

Established in 1950 the United States Educational Foundation in India (USEFI) has been the largest Fulbright program in the world. Its objectives perhaps are best expressed as officially stated by the USEFI Board of Directors on November 28, 1958:

1. The United States Educational Foundation in India seeks to contribute to better understanding and closer relations between India and the United States, specifically by increasing the number of Indians and of Americans who have direct knowledge of both countries, and by providing indirect knowledge to larger numbers through students and professors in the universities of both. To this end, the Foundation proposes to exchange the best representatives, qualified to present the cultural and social values of each country.
2. The Foundation proposes further to increase the knowledge available by providing additional opportunities in Indian studies to American students, and in American studies to Indian students.

3. A further objective of the Foundation is to aid Indian education: first, to strengthen the universities by assisting them in specific subjects which are new or weak, and in which American education has notable development; and secondly, to cooperate in the reorientation and reconstruction of secondary education.
4. On the other hand, the Foundation seeks to provide opportunities to American scholars to make first-hand studies in India of their various subjects, and also to enjoy the experience of teaching in Indian universities.
5. The educational exchange program gives a needed opportunity for personal contact among students and scholars, which is of great value to professional advancement.
6. The sharing of knowledge and experience taking place in all of these objectives provides a sound basis for long-run mutual understanding so desirable in the present political context.

Space does not permit an adequate description of the excellent work done by this bi-national foundation since its birth in 1950. Norman Dawes' *A Two-Way Street: The Indo-American Fulbright Program* 1950-60 (New York: Asia Publishing House, 1962) is recommended for those seeking further information on USEFI.

In the 1960's as part of its goal "to exchange the best representatives . . ." the Foundation became particularly interested in the thousands of non-sponsored Indian students annually who consider study in the United States. Of particular interest to the United States admissions officer in this regard should be the Evaluation Testing and Advising (ETA) Project launched by USEFI in 1967-68 during the author's Fulbright assignment with USEFI. Through this project, Student Advising Offices staffed by competent Indian professionals (generally with American-earned doctorates) have been established in major Indian cities. With the added support of the United States Information Service and countless United States institutions, these offices have extensive collections of United States college and university catalogs for use by the Student Advisers and by the thousands of Indian students who visit these offices each year. United States institutions may wish to call these advising offices to the attention of Indian students in their correspondence and literature.

Also begun in 1967-68 was an Interviewing and Evaluation Service

(IES) in which participating United States colleges and universities refer pre-screened Indian applicants at the graduate level to USEFI for an interview and evaluation similar to that provided by the Institute for International Education in such locations as Hong Kong. Available at first to a restricted number of United States institutions on an invitational basis, the IES has been expanded to allow a substantial increase in the number of United States schools that can be served. United States admissions officers at the graduate level that are interested should contact USEFI at its 12 Hailey Road, New Delhi-1, India headquarters.

In its New Delhi headquarters the USEFI ETA Project has assembled a rather comprehensive library of Indian prospectuses, syllabi, handbooks, annual reports and other references on Indian education in general and on higher education in particular. This library is used extensively in the Interviewing and Evaluation Service reporting and in replying to inquiries from the United States.

The USEFI ETA Project also coordinates and furnishes technical supervision for the English proficiency testing conducted in India for student visa purposes. In addition, in some locations it provides the testing site and/or testing supervisor and proctors for such United States admissions testing as TOEFL, GRE and ATGSB.

In keeping with the spirit of the above program, the ETA Project also seeks to furnish professional assistance to the Student Information Bureaus of Indian universities that maintain reference libraries and advising services on overseas studies.

CURRENCY EXCHANGE

A number of United States institutions include in their admission and selection process an assessment of the financial status of the foreign applicant. Where this is the case, the United States institution needs to exercise certain caution in the instance of countries such as India where rather strict currency exchange controls exist. For the applicant and/or his sponsors may have substantial financial resources in the home country but may be unable to obtain the necessary exchange for foreign currency.

The Government of India each year announces the regulations to apply for currency exchange in the subsequent year. Illustrative is the Government of India Press Note in Appendix L.

United States institutions wishing to exercise particular caution in this area may wish to secure any financial resources certification from an Indian applicant and/or his sponsor in terms of the number of United States dollars to be available each year for the applicant's use while in the United States pursuing the proposed program of academic study.

The Government of India, through the Reserve Bank of India, in recent years has allowed authorized dealers in foreign exchange to release up to a cumulative maximum of the equivalent of 20 United States dollars for the payment of required testing fees (such as TOEFL, GRE and SAT) upon presentation to such a dealer of documentary evidence that such testing is required by a specific United States institution. However, application fees and advance deposits have not been covered by this procedure and the Indian applicant has had to submit a special application to the Reserve Bank of India for that type of exchange. While this process may take as few as two weeks to accomplish, considerably longer time may be required, especially if the applicant does not reside in a Reserve Bank city.

KEY REFERENCES

A number of excellent references exist that can be used by United States admissions officers and others in comprehending the complexities of the Indian educational system. These references can be ordered through the United States Educational Foundation in India, 12 Hailey Road, New Delhi-1, India. That foundation upon request will mail the publications and bill the United States institution for the cost of the publications and postage (either surface or air post may be elected). Dollar remittance can be used by the United States institutions. In the paragraphs that follow the approximate cost (including the publication itself and surface postage charges) has been shown in parentheses after the full designation for each publication.

The most valuable of these references is the *Universities Handbook: India and Ceylon* ($14.00) published by the Inter University Board of India and Ceylon, Rouse Avenue, New Delhi-1, India. Currently the Handbook is revised biennially and the sixteenth edition is scheduled for publication in early 1971. While it might be compared somewhat to the *Commonwealth Universities Yearbook* in format, this Handbook is far more detailed in its coverage and the data more current and comprehensive. This author was advised in August 1970 by Dr. Amrik Singh, Secretary of the Inter University Board, that this author's suggestion on behalf of United States admissions officers that annual examination results be included henceforth in the individual university descriptions would be adopted effective with the forthcoming edition.

For those concerned with the admission and placement of Indian engineering and other technological students the *Facilities for Technical Education in India* ($3.00) published by the Ministry of Education, Government of India, New Delhi, India provides such valuable information on each institution as: details of administration; courses of study offered (type, duration and number of seats or enrollment capacity); and admission requirements (minimum and maximum age, academic qualifications and methods of selection). Now in its third edition, this is a two-volume publication (available in a combined form from the United States Educational Foundation in India). Volume I gives information on the facilities for technical education at the diploma and certificate—post-secondary—level; whereas Volume II does so at the first degree, post-graduate and research level.

The *Directory of Institutions for Higher Education* ($2.80), also published by the Ministry of Education, is a biennial reference that presents information about the courses of study available in the universities, the institutions "of national importance" and other institutions of higher education. Information includes: type of institution; departments of studies; academic terms; medium of instruction; total intake capacity; the minimal admission requirements for and the duration of the first degree courses in the various professional fields; and affiliated and/or constituent colleges.

Written by an American professor who spent two years in India as a Fulbrighter, *The Indian University* ($3.50) by Robert L. Gaudino is an excellent commentary on Indian higher education and is considered so by most knowledgeable Indians. The contents of the book include the following: The Setting, University Education, The Colleges, Government and the University, Decision and Administration, Teacher and Student, and Medium and General Education.

CHAPTER IX

Admissions and Placement Recommendations

The following admission and placement recommendations were approved by the Council on Evaluation of Foreign Student Credentials, July 30-31, 1970.

A. *GENERAL CONSIDERATIONS.*

1. *Credentials to be Required.* It is recommended that official records (originals or copies of originals as certified by a school or government official) be required for each examination that the applicant has taken, beginning with the Secondary School Certificate (S.S.C.) or its equivalent - whether undergraduate or graduate admission is being sought. These official records should include the certificate issued after each examination and the marks sheets showing: the individual subjects tested; the maximum, minimum and awarded marks in each subject as well as the overall results; and the level of pass, class or division received. In the case of a missing credential, caution must be exercised as the reluctance or failure to furnish the missing credential may suggest a poor academic year. It is suggested that the U.S. institution calculate the percentages of marks, rather than accept the calculations that may be shown on the records.

Because of the variety of educational patterns within India, the use of a form for a detailed, chronological statement of the educational record of the Indian applicant is recommended. A sample of such a form is included in the appendices (which may be duplicated by any institution for its own use).

2. *Syllabus.* A syllabus, course sheet, university catalog, or statement from the applicant on the content of each subject covered in a given examination is highly desirable for credential evaluation, and especially at the undergraduate transfer and graduate admission levels.

3. *English Proficiency.* It is recommended that the Indian applicant submit results of TOEFL (the Test of English as a Foreign Language) for use in assessing his English proficiency.

4. *Aptitude Testing.* It is recommended that tests such as the College Entrance Examination Board's Scholastic Aptitude and Achievement Tests, the Graduate Record Examinations' Aptitude and Ad-

vanced Tests, and the Admission Test for Graduate Schools of Business, especially where required for U.S. applicants, be required of an Indian applicant and the results considered in the admissions process.

5. *Age of Applicant.* Caution should be exercised about the age of the Indian applicant, especially at the freshman and undergraduate transfer admission levels. Not only may he be young in absolute terms, but also he may be even younger than his chronological years in terms of social maturity. Therefore, he should be expected to be at least as old as his U.S. counterpart at the admission level being considered. This is particularly true in the case of the female Indian applicant.

6. *Quality Clues - Institution.* The following quality clues (applicable to Indian institutions) are recommended for considering in the credential evaluation process:*

a. *Age of the Institution.* While the age of the Indian university can be misleading, generally the older universities and colleges tend to be stronger.

b. *Relationship to Degree-Granting Institution.* All things being equal, the product of a university teaching department is likely to be stronger than one with a similar record from an affiliated college in that same university. Similarly, the graduate of a constituent college is likely to be stronger than one with a similar record from an affiliated college (though here the better, older private affiliated colleges must not be underrated).

c. *Scope of Programs Offered.* Generally, the constituent or affiliated college that offers both master's and bachelor's degree work is of higher quality than the college within that same university that does not. Similarly, the college that provides course work for B.A. Honors, as well as B.A. Pass, can be considered of higher quality than the college in that university that offers only B.A. Pass instruction.

d. *"Public" Secondary Schools.* The so-called public (really "private" in U.S. terms) secondary schools generally can be considered as of higher quality than the government ones.

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*See Appendices A-H for detailed information related to these clues.

e. *Advanced Centres of Study.* The quality of education in an Advanced Centre of Study in an Indian university as designated by the University Grants Commission can be regarded as among the best, if indeed not the best, in that field in India.

f. *"Institutions of National Importance" and "Institutions Deemed to be Universities."* The institutions so officially designated can be considered among the best in India.

g. *Admissions Standards and Annual Examination Results.* The admissions standards imposed by an Indian institution for a given degree program are valuable information in assessing the quality of its student body.

   In addition, the results of the annual examinations can be regarded as an index of the competiveness of the institution. Such data as the percentages of failures and Divisions I, II and III on particular examinations, and for a particular degree-level overall, are especially useful in this connection.

h. *Faculty.* The *Universities Handbook: India and Ceylon* gives valuable data about enrollments and the faculty in the various university faculties, including the degrees held by the faculty members, the institutions from which the degrees were obtained, and the proportion of readers and lecturers. This handbook is described in some detail in Chapter VIII.

7. *Quality Clues—Individual Applicant.*

   a. *Consistency of Marks Records.* Another quality clue is the consistency of the percentage of maximum marks from the secondary level onward. Caution should be the watchword in the case of an inconsistent record, and a detailed explanation should be sought from the applicant before further admission consideration is given.

   b. *Overall Marks vs. Marks in Separate Subjects.* Not only should the overall percentage of maximum marks be scrutinized in the admission evaluation of the Indian applicant, but also the marks in individual subjects, especially where particularly pertinent as preparation for the U.S. degree being sought. Also, since the class or division of the Indian degree often is awarded primarily for the last year's work, the mark sheets for the earlier work toward the degree should be reviewed carefully with special scrutiny for any "condoned failure" (forgiveness of a failure in a given subject) or "grace marks" (gratuitous addition of extra marks).

c. *Division or Class of Applicant's Record.* A Division III record, especially if the applicant's work has been consistently at that level, represents a weak student even from a better institution. With appropriate allowance for the quality of the institution as suggested above and for any strong aptitude test results, a useful interpretive table for U.S. admissions purposes may be as follows: Division I (60% and higher)=A; High Division II (55-59.9%)=B; Low Division II (45-54.5%)=C; and Division III (35-44.9%)=D.

d. *Internal or External Student Status.* Generally, the external or private student (the one who has prepared for an Indian examination without attendance at the examining university either in a teaching department or in an affiliated or constituent college) should be considered with greater caution than the internal student with similar results on the same examination.

e. *Quality of References.* References from Indian referees for Indian applicants can be useful in assessing the quality of the individual if a carefully devised form is prescribed by the U.S. institution in requesting such references.

f. *Aptitude and Achievement Test Results.* The results of aptitude and achievement tests, such as referred to in paragraph 4 above, can serve a validating function in the case of individual applications from lesser known institutions. While verbal aptitude scores may be influenced substantially on the negative side by inadequate English proficiency, the mathematical aptitude and the achievement test results in particular can be used meaningfully to compare Indian and U.S. applicants for admission purposes.

B. GENERAL PLACEMENT RECOMMENDATIONS FOR U.S. EDUCATION

The General Placement Recommendations that follow are based mainly on **quantity** (number of years) rather than **quality**. The reader is urged to apply these "quantity assessments" in combination with (1) the quality clues described in the General Considerations section above and (2) the information on curricular content outlined in Chapters V, VI and VII and in the **Universities Handbook: India and Ceylon.**

(1) Certificate, Diploma or Degree	(2) Typical Years of Education	(3) Typical Age	(4) Awarded By	(5) General Placement Level Recommendations Based Mainly on Quantity (Number of Years)	(6) Supplementary Information and References
Secondary Level					
High School Certificate (H.S.C.)	10	16	State Board of Education	High School Grade 11	See Educational System Chart of the Republic of India for the varieties of patterns among the different states. Also see Chapter V.
Matriculation Certificate	10	16	University	High School Grade 11	
Secondary School Certificate (S.S.C.)	10	16	State Board of Secondary Education	High School Grade 11	
Secondary School Leaving Certificate (S.S.L.C.)	10	16	Secondary School	High School Grade 11	
Junior Diploma in Engineering	11	17	State Board of Technical Education	High School Grade 11	
Junior Technical School Certificate	11	17	State Board of Technical Education	High School Grade 11	
Secondary Technical Certificate	11	17	State Board of Technical Education	High School Grade 11	
Higher Secondary Level					
Indian School Certificate	11	17	Indian School Syndicate	High School Grade 12	See Educational System Chart of the Republic of India for the varieties of patterns among the different states. Also see Chapter V.
Higher Secondary School Certificate (H.S.S.C.)	11	17	State Board of Secondary Education	High School Grade 12	
Pre-Degree Certificate	11	17	University	High School Grade 12	
Pre-University Examinations (Arts, Sciences & Commerce)	11	17	University	High School Grade 12	
Senior Cambridge Certificate	11	17	University of Cambridge	High School Grade 12	

Certificate, Diploma or Degree	(2) Typical Years of Education	(3) Typical Age	(4) Awarded By	(5) General Placemem Level Recommendations Based Mainly on Quantity (Number of Years)	(6) Supplementary Information and References
Intermediate Level					
First Year B.A., B.Sc. & B.Com. Examinations	12	18	University	College Freshman	
Intermediate Certificate (Arts, Science & Commerce)	12	18	State Board of Secondary & Intermediate Education	College Freshman	
Pre-Professional Examinations (Pre-Dental, Pre-Engineering, Pre-Medical, etc.)	12	18	University	College Freshman	
Diploma of Engineering and in Ceramics	13	19	State Board of Technical Education	College Freshman	Also referred to as "Licenciate" or "Licentiate"
Diploma in Dancing and in Fine Arts	13	19	University	College Freshman	
Diploma in Education	13	19	University & State Directorate of Education	College Freshman	Also referred to as "Licenciate" or "Licentiate"
First Degrees					
Bachelor of Arts, Science & Commerce (Pass, General & Honors), Bachelor of Physical Education	14	20	University	Up to 2 years of College Credit	If 15-year sequence, up to 3 years of credit; otherwise up to 2 years. See Educational System Chart of the Republic of India for the varieties of patterns among the different states. Also see Chapter VI.
Bachelor of Pharmacy	15	21	University	Up to 3 years of College Credit	
Bachelor of Dental Surgery	16	22	University	Graduate Admission	
Bachelor of Engineering, Technology & Architecture; Bachelor of Science (Engineering)	16	22	University	Graduate Admission	

First Degrees (continued on next page)

(1) Certificate, Diploma or Degree	(2) Typical Years	(3) Typical Age	(4) Awarded By	(5) General Placement Level Recommendations Based Mainly on Quantity (Number of Years)	(6) Supplementary Information and References
First Degrees (continued)					
Bachelor of Medicine & Bachelor of Surgery (M.B.B.S.)	16½	23	University	Graduate Admission	
Bachelor of Science (Nursing)	16	22	University	Graduate Admission	
Bachelor of Veterinary Science	16	22	University	Graduate Admission	
Post-Graduate Diplomas					
Post-Graduate Diploma in Home Science, Language Librarianship, and Social Work	15	21	University	Up to 3 Years of College Credit; Graduate Admission Where 16 Years in Length and Strong Record.	Considerable variety in length among different universities. See Chapter VI.
Post-Graduate Diploma in Business Administration, Business Management, and Industrial Management	16	22	University	Graduate Admission	Considerable variety in length among different universities. See Chapter VI.
Second Degrees					
Bachelor of Education, Library Science & Teaching	15	21	University	Graduate Admission	If strong Div. I or II record.
Bachelor of Laws	16	22	University	Graduate Admission	
Master of Arts, Science, Commerce & Education	16	22	University	Graduate Admission	
Master of Engineering & Technology	18	24	University	Graduate Admission with Advanced Standing Accorded a U.S. Master's Degree.	

Certificate, Diploma or Degree	(2) Typical Years of Education	(3) Typical Age	(4) Awarded By	(5) General Placement Level Recommendations Based Mainly on Quantity (Number of Years)	(6) Supplementary Information and References
Doctoral Degrees					
Doctor of Philosophy	18	24	University	Graduate Admission With Advanced Standing Accorded a U.S Master's Degree.	

NOTES:

(1) The certificates, diplomas, and degrees most likely to be presented to U.S. institutions have been listed. The reader is urged especially to use the chronological statement of educational record (described in the General Considerations section above) in the case of other certificates, degrees, or diplomas to assess their length.

(2) The reader is urged to use the Educational System Chart of the Republic of India to assist him in assessing the length of the educational program represented in any given set of credentials **as the variety is considerable.**

(3) "Typical age" is less likely to be so at the higher age levels.

(4) The prevailing current practices are stressed here. Earlier practices differ (particularly in that the universities issued the Intermediate Certificates).

(5) The placement levels are recommended mainly in terms of **quantity** (number of years) rather than **quality.** The reader is urged to apply these "quantity assessments" in combination with the quality clues described in the General Considerations section above and the information on curricular content outlined in Chapters V, VI and VIII in the **Universities Handbook: India and Ceylon.**

(6) The reader is strongly advised to note and use the supplementary information and references in this column.

BIBLIOGRAPHY

Adams, Walter (ed.). *The Brain Drain.* New York: MacMillan, 1968.

Airan, J. W. *College Administration—A Proposal.* New York: Asia Publishing House, 1965.

Airan, J. W. (ed.). *College Education in India.* Bombay: P. C. Monaktala & Sons, 1967.

Annual Report: 1965-66. New Delhi: Ministry of Education, Government of India, 1966.

Ashby, Eric. *Universities: British, Indian, African: A Study in the Ecology of Higher Education.* Cambridge: Harvard University Press, 1966.

ASSIST Newsletter (various). New Delhi: ASSIST.

Baldwin, George B. "Brain Drain or Overflow," *Foreign Affairs,* XLVIII, No. 2 2 (January, 1970).

Borgstrom, Georg. *The Hungry Planet.* New York: Macmillan, 1965.

Bowles, Chester. *The Makings of a Just Society.* Delhi: University of Delhi, 1963.

Brooks, Robert R. R. "Can India Make It?" *Saturday Review,* August 9, 1969.

Centres of Advanced Study in Indian Universities. Delhi: University Grants Commission, 1967.

Chaudhuri, Nerad C. *The Continent of Circe.* Bombay: Jaico Publishing House, 1965.

Coelho, George V. *Changing Images of America: A Study of Indian Students' Perceptions.* Glencoe: The Free Press, 1958.

Constitution of India. Delhi: Manager of Publications, 1951.

The Constitution of India. New Delhi: Ministry of Law, Government of India, 1967.

Coombs, Philip H. *The World Educational Crisis: A Systems Analysis.* London: Oxford University Press, 1968.

Cormack, Margaret. *She Who Rides a Peacock—Indian Students and Social Changes.* New York: Frederick Praeger, 1961.

Dawnes, Norman. *A Two-Way Street: Indo-American Fulbright Program 1950-1960.* New York: Asia Publishing House, 1962.

Directory of Institutions for Higher Education 1967. Ministry of Education, Government of India.

Dongerkery, S. R. *University Education in India.* Bombay: P. C. Manaktola & Sons, 1967.

Dube, S. C. *India's Changing Villages.* London: Routledge & Kegan Paul, 1958.

Dube, S. C. *Indian Village.* Ithaca: Cornell University Press, 1955.

Education in India: A Graphic Presentation. New Delhi: Ministry of Education, 1966.

Edwards, Michael. *A History of India, from the Earliest Times to the Present Day.* New York: Farrar, Straus, and Cudahy, 1961.

Evaluations in Higher Education. New Delhi: University Grants Commission, 1961.

Facilities for Technical Education in India. Vols. I, II. Ministry of Education, Government of India, 1965.

First Five Year Plan 1951-56. Delhi: Planning Commission, Government of India, 1952.

Fischer, Louis. *Gandhi: His Life and Message for the World.* New York: The New American Library, Inc., 1954.

Fischer, Louis. *The Life of Mahatma Gandhi.* New York: Harper & Bros., 1950.

The Ford Foundation in India 1951-1958. New Delhi: Ford Foundation, 1968.

Fourth Five Year Plan: A Draft Outline. New Delhi: Planning Commission, Government of India, 1966.

Gandhi, M. K. *My Philosophy of Life.* Bombay: Pearl Publications, 1961.

Gaudino, Robert. *The Indian University.* Bombay: Popular Prakashav, 1965.

The Gazetteer of India: *Volume One-Country and People.* New Delhi: Ministry of Information and Broadcasting, Government of India, 1965.

"Gradings in University Degrees." *Technical Manpower.* Bulletin of the Division for Scientific and Technical Personnel, Council for Scientific and Industrial Research. March, 1969.

Haggerty, William J. *Higher and Professional Education in India.* Washington: U. S. Department of Health, Education and Welfare, 1969.

Handbook of Engineering Education in India. New Delhi: Inter University Board of India and Ceylon, 1968.

Handbook of Universities in India: 1963. New Delhi: University Grants Commission, 1964.

Hauser, Philip M. (ed.). *Population and World Politics.* Bombay: Jaico Publishing House, 1958.

Higher Education in India: *Courses in Physical Education.* New Delhi: Ministry of Education, Government of India, 1966.

Higher Education in India: *Courses in Physical Educaion.* New Delhi: Ministry of Education, Government of India, 1966.

Higher Education in India: First Degree Courses in Medicine, New Delhi: Ministry of Education, Government of India, 1966.

Higher Education in India: *Home Science Courses.* New Delhi: Ministry of Education, Government of India, 1966.

Holmes, W. Robert. *Research Facilities in Delhi.* Delhi: Kwality Booksellers & Publishers, 1967.

Holmes, W. Robert. *Research Facilities in Hyderabad.* New Delhi: U.S. Educational Foundation in India, 1967.

Huq, Muhammad S. *Education and Development Strategy in South and Southeast Asia.* Honolulu: East-West Center Press, 1965.

Indian Students Attended M.I.T. Graduate School At Least One Year: *September 1946 to June 1964.* Mimeographed Paper.

International Action to Avert the Impending Protein Crisis. New York: United Nations, 1968.

Jameson, Sanford (ed.). *The Admission and Placement of Students from the Pacific-Asia Area*: *A Workshop Report.* May, 1970.

Lilyveld, Joseph. "Indian Students Demand—A Safe Job in the Establishment," *The New York Times Magazine,* May 12, 1968.

List of Colleges Under Section 2(F) of the U. G. C. Act. New Delhi: University Grants Commission, 1967.

List of Colleges Under Section 2(F) of the U. G. C. Act. New Delhi: University Grants Commission, 1970.

List of Universities, Institutions Deemed to Be Universities and Institutions of National Importance as on 1st August 1970. Mimeographed. New Delhi: University Grants Commission, 1970.

Master's Degree Awarded in India in Science Subjects 1921-1965. New Delhi: Council of Scientific and Industrial Research, 1967.

"Master's Degrees in Science Subjects," *Technical Manpower.* Bulletin of the

Directorate of Scientific and Technical Personnel. Council for Scientific and Industrial Research. IX, No. 11 (November, 1967).

McNeely, Samuel S., Jr. "The Academic Credentials of Indian Applicants," *College and University*, Spring 1967.

Medium of Instruction Report. New Delhi: University Grants Commission, 1961.

Mellor, John W., et al. *Developing Rural India: Plan and Practice*. Ithaca: Cornell University, 1968.

Morehouse, Ward (ed.) *Science and the Human Condition in India and Pakistan*. New York: Rockefeller University Press, 1968.

Morehouse, Ward (ed.). *Understanding Science and Technology in India and Pakistan*. Occasional Publication No. 8, Foreign Area Materials Center, University of the State of New York, State Department, 1967.

Mukerjee, Rasupati and Vold, Robert D. "Correlation of Indian Training with American School Requirements," *Journal of Chemical Education*. December, 1969.

Nair, Kusum, *Blossoms in the Dust: The Human Factor in Indian Development*. New York: Frederick A. Praeger, Inc., 1961.

"National Register of Scientific and Technical Personnel," *Technical Manpower*. Bulletin of the Directorate of Scientific and Technical Personel, CSIR. IX, No. 12 (December, 1967).

Nehru, Jawaharlal. *The Discovery of India*. New York: The John Day Co., 1946.

Parthasarathi, Ashok. "India's 'Brain Drain' and International Norms," *International Educational and Cultural Exchange*. Summer, 1967.

Pavate, D. C. *Memoirs of an Educational Administrator*. New Delhi: Prentice-Hall of India, 1964.

Piesch, Mark L. *The Foreign Graduate Student at Twenty Two American Institutions: Admissions and Financial Aid*. Mimeographed Paper. 1965.

Post-Graduate Medical Education: Directory of Post-Graduate Medical Degrees and Diplomas in India. New Delhi: Ministry of Health and Family Planning, 1966.

Post Report: New Delhi. New Delhi: U. S. Embassy.

Proceedings of Annual Meetings (various). New Delhi: Inter University Board of India and Ceylon.

Prospectuses, syllabi and other bulletins of various Indian schools colleges, universities, and other educational institutions and agencies.

Radhakrishnan. *The Hindu View of Life*. London: Unwin Books, 1927.

Report for the Year (various). New Delhi: University Grants Commission.

Report of the Committee on Post-Graduate Engineering Education and Research. New Delhi: Ministry of Scientific Research and Cultural Affairs, 1961.

Report of the Conference on Problems of Teaching English. New Delhi: University Grants Commission, 1959.

Report of the Education Commission 1964-66. New Delhi: Ministry of Education, Government of India, 1966.

Report of the University Education Commission. Delhi: Ministry of Education, Government of India, 1962.

Report on Examination Reform. New Delhi: University Grants Commission, 1962.

Report on the Committee on Colleges. New Delhi: University Grants Commission, 1967.

Report on General Education. New Delhi: University Grants Commission, 1962.

Report on the Problem of Student Indiscipline in Indian Universities. New Delhi: University Grants Commission, 1960.

Report on Standards of University Education. New Delhi: University Grants Commission, 1965.

Report 1966-67. New Delhi: Ministry of Education, Government of India, 1967.

Review Committee Reports. Botany, 1963; Biochemistry, 1963; Chemistry, 1966; Education, 1966; English, 1965; Library Science, 1965; Mathematics, 1962; Philosophy, 1966; Social Work, 1965; Sociology, 1966. New Delhi: University Grants Commission.

Rules and Syllabuses of Studentship and Associate Membership Examinations. Calcutta: The Institution of Engineers (India), 1962.

Sahni, A. B. *One Thousand Professions and One Million Jobs.* New Delhi: Parent Teacher Association, 1965.

Sapra, C. L. *Educational Wastage and Stagnation in India.* New Delhi: National Council of Educational Research and Training, 1967.

Scientific Research in Indian Universities. New Delhi: Council of Scientific and Industrial Research, 1965.

Second All-India Educational Survey. New Delhi: National Council of Educational Research and Training, 1967.

Second Five Year Plan 1956-61: A Draft Outline. Delhi: Planning Commission, Government of India, 1956.

Selected Studies in Inter-Cultural Education: Review of Twenty Two Studies. NAFSA Studies and Papers Research Series No. 4. New York: The National Association of Foreign Student Advisors, 1962.

Shah, A. B. *Higher Education in India.* Bombay: Lalvani Publishing House, 1967.

Shah, A. B. "Medium of Higher Education," *Quest 56.* No. 56. January/March, 1968.

Sharma, Keshav Dev. "Indian Students in the United States," *International Educational and Cultural Exchange.* Spring, 1969.

Studies in Examination Results (Delhi University). New Delhi: University Grants Commission, 1966.

The Directory of Scientific Research Institutions in India 1969. Delhi: India Scientific Documentation Centre, 1969.

The Study of English in India. New Delhi: Ministry of Education, Government of India, 1967.

Taylor, H. I. *Three Studies in Examination Technique.* New Delhi: University Grants Commission, 1964.

Test of English as a Foreign Language (TOEFL) Interpretive Information January 1970. Princeton: Educational Testing Service, 1970.

Third Five Year Plan 1961-66. Delhi: Planning Commission, Government of India, 1961.

Towards Understanding India. New Delhi: Indian Council for Cultural Relations, 1965.

Twenty Five Years of CSIR. New Delhi: Government of India, 1967.

Universities Handbook: India and Ceylon 1969 New Delhi: Inter University Board of India and Ceylon.

University and College Libraries. New Delhi: University Grants Commission, 1965.

University Development in India: Basic Facts and Figures 1966-67. New Delhi: University Grants Commission, 1967.

University News (various). New Delhi: Inter University Board of India and Ceylon.

Useem, John, and Useem, Ruth. *The Western Educated Man in India.* New York: Dryden Press, 1955.

Walpole, Norman C., et al. *U. S. Army Area Handbook for India.* Washington: Department of the Army, 1964.

Wilcox, Lee. *The Evaluation of Asian Educational Credentials: A Workshop Report.* New York: National Association for Foreign Student Affairs, 1966.

Willard, Frances M. *The Republic of India: A Guide to the Academic Placement of Students from the Republic of India in United States Educational Institutions.* World Education Series. Washington: American Association of Collegiate Registrars and Admissions Officers, 1964.

Wiser, Charlotte Veall, and Wiser, William H. *Behind Mud Walls.* New York: Smith, 1930.

World Population: Challenge to Development. New York: United Nations, 1966.

World Population Prospects. New York: United Nations, 1966.

Zachariah, Mathew. "Academic Secondary Education in India," *Comparative Education Review.* June, 1970.

Zinkin, Taya. *Challenges in India.* New York: Walker & Co., 1966.

Zinkin, Taya. *India.* London: Oxford Universiy Press, 1961.

APPENDIX A

Universities, Institutions Deemed to be Universities and Institutions of National Importance 1970

The following list is based on *List of Universities, Institutions Deemed to be Universities and Institutions of National Importance As On 1st Aug. 1970,* (Mimeographed), University Grants Commission, New Delhi. For more detailed information the reader is referred to Appendices B and C and especially to the Inter University Board *Handbook*.

Appendices A, B and C have been designed especially for use with the Admission and Placement Recommendations in Chapter IX.

LIST OF UNIVERSITIES AUG. 1970

1. Agra University,
Agra.
2. Aligarh Muslim University,
Aligarh.
3. Allahabad University,
Allahabad.
4. Andhra University,
Waltair.
5. Andhra Pradesh Agricultural
University; Rajendra Nagar,
Hyderabad.
6. Annamalai University,
Annamalainagar, P.O.
7. Assam Agricultural University,
Jorhat.
8. Awadhesh Pratrap Singh
University, Rewa (M.P.)
9. Banaras Hindu University,
Varanasi.
10. Bangalore University,
P.B. No. 17, Bangalore.
11. Berhampur University,
Berhampur.
12. Bhagalpur University,
Bhagalpur.
13. Bihar University,
Muzaffar-pur.
14. Bombay University,
Bombay.
15. Burdwan University,
Burdwan.
16. Calcutta University,
Calcutta.
17. Calicut University,
P. O. Calicut University,
(Kerala)
18. Delhi University,
Delhi.
19. Dibrugarh University
Rajabheta, Dibrugarh.
20. Gauhati University,
Gauhati.
21. Gorakhpur University,
Gorakhpur.
22. Gujarat University,
Ahmedabad.
23. Gujarat Ayurveda
University, Jamnagar.
24. Guru Nanak University,
Amritsar.
25. Haryana Agricultural
University, Hissar.
26. Indira Kala Sangeet
Vishwavidyalaya,
Khairagarh (M.P.)
27. Indore University,
Indore.
28. Jabalpur University,
Jabalpur.
29. Jadavpur University,
Calcutta—32.
30. Jammu University,
Jammu.
31. Jawaharlal Nehru
University, New Delhi.
32. Jawaharlal Nehru Krishi
Vishwavidyalaya, Jabalpur.
33. Jiwaji University,
Gwalior.
34. Jodhpur University,
Jodhpur.
35. Kanpur University,
Kanpur.
36. Kalyani University,
P. O. Kalyani (W.B.)

37. Kameshwar Singh Darbhanga
Sanskrit University,
Darbhanga

38. Karnatak University
Dharwar.

39. Kashmir University,
Srinagar.

40. Kerala University,
Trivandrum.

41. Kurushetra University
Kurushetra.

42. Lucknow University,
Lucknow.

43. Madras University,
Madras.

44. Madurai University,
Madurai.

45. Magadh University,
Bodh Gaya, (Bihar.)

46. Maharaja Sayajirao
University of Baroda,
Baroda.

47. Mahatma Phule Krishi
Vidyapeeth, Poona-5.

48. Marathwada University,
Aurangabad.

49. Meerut University,
Meerut.

50. Mysore University,
Mysore.

51. Nagpur University,
Nagpur.

52. North Bengal University,
P. O. North Bengal University,
Raja Rammohanpur (Darjeeling).

53. Orissa University of
Agriculture and Technology,
Bhubaneswar.

54. Osmania University,
Hyderabad.

55. Panjab University,
Chandigarh.

56. Panjab Agricultural University,
Ludhiana.

57. Patna University,
Patna.

58. Poona University,
Poona.

59. Punjabi University,
Patiala.

60. Punjab rao Krishi Vidyapith,
Akola.

61. Rabindra Bharati,
Dwarakanath Tagore Lane,
Calcutta.

62. Rajasthan University,
Jaipur.

63. Ranchi University,
Ranchi.

64. Ravi Shankar University,
Raipur.

65. Roorkee University,
Roorkee.

66. Sambalpur University,
at Budharaja, Sambalpur.

67. Sardar Patel University,
Vallabh Vidyanagar,
Via Anand.

68. Saugar University,
Sagar.

69. Saurashtra University,
Rajkot.

70. Shivaji University,
Kolhapur.

71. Shrimati Nathibai
Damodar Thakersey Women's
University, Bombay (20-BR)

72. South Gujarat University,
P.B. NO. 49, Govt Medical
College Campus, Surat.

73. Sri Venkateswara University,
Tirupati.

74. Udaipur University,
Pratapnagar, Udaipur.

75. University of Agricultural
Sciences, Malleswaram,
Bangalore-3.

76. Utkal University,
Vani Vihar, *Bhubaneshwar.*

77. U.P. Agricultural
University Pant Nagar,
P.O. Phoolbagh,
Distt. *Nainital.*

78. Varanaseya Sanskrit
Vishwavidyalaya,
Varanasi.

79. Vikram University,
Ujjain.

80. Visva Bharti
Santiniketan.
(West Bengal).

INSTITUTIONS DEEMED TO BE UNIVERSITIES

1. Birla Institution of Technology and Science, Pilani.
2. Gujarat Vidyapith, Ahmedabad.
3. Gurukul Kangri Vishvavidyalaya, Hardwar.
4. Indian Agricultural Research Institute, Hill Side Road, New Delhi.
5. Indian Institute of Science Bangalore.
6. Indian School of Mines, Dhanbad.
7. Jamia Millia Islamia, New Delhi.
8. Kashi Vidyapith, Varanasi.
9. Tata Institute of Social Sciences, Bombay.

INSTITUTIONS OF NATIONAL IMPORTANCE

1. All India Institute of Medical Science, New Delhi.
2. Dakshina Bharat Hindi Prachar Sabha, Madras.
3. Hindi Sahitya Sammelan, Allahabad.
4. Indian Statistical Institute, Calcutta.
5. Indian Institute of Technology, New Delhi.
6. Indian Institute of Technology, Kanpur.
7. Indian Institute of Technology, Kharagpur.
8. Indian Institute of Technology, Madras.
9. Indian Instittue of Technology, Bombay.
10. Post-Graduate Research Institute in Medicine, Chandigarh.

LIST OF UNIVERSITIES: STATE WISE AUG. 1970

STATE	UNIVERSITIES LOCATED IN THE STATE
Andhra Pradesh	1. Andhra 2. Andhra Pradesh Agricultural 3. Osmania 4. Sri Venkateswara
Assam	1. Dibrugarh. 2. Gauhati 3. Assam Agricultural
Bihar	1. Bhagalpur. 2. Bihar 3. K. S. Darbhanga Sanskrit 4. Magadh 5. Patna 6. Ranchi
Gujarat	1. Gujarat Ayurveda. 2. Baroda 3. Gujarat 4. Sarada Patel 5. Saurashtra 6. South Gujarat

LIST OF UNIVERSITIES: STATE WISE AUG. 1970 (*Continued*)

STATE	UNIVERSITIES LOCATED IN THE STATE
Haryana	1. Kurushetra
	2. Haryana Agricultural
Jammu & Kashmir	1. Jammu
	2. Kashmir
Kerala	1. Calicut
	2. Kerala
Madhya Pradesh	1. Awadhesh Pratap Singh
	2. Indira Kala Sangit
	3. Indore
	4. Jabalpur
	5. Jawaharlal Nehru Krishi
	6. Jiwaji
	7. Ravi Shanker
	8. Saugar
	9. Vikram
Madras	1. Annamalai.
	2. Madras
	3. Madurai
Maharashtra	1. Bombay.
	2. Marathwada
	3. Maharashtra Krishi Vidyapeeth
	4. Nagpur
	5. Poona
	6. S.N.D.T. Women's
	7. Shivaji
	8. Punjabrao Krishi Vidyapith, Akola
Mysore	1. Bangalore
	2. Karnatak
	3. Mysore
	4. University of Agricultural Sciences, Bangalore
Orissa	1. Berhampur
	2. Orissa University of Agriculture and Technology
	3. Sambalpur
	4. Utkal
Punjab	1. Punjab
	2. Punjab Agricultural
	3. Punjabi
	4. Guru Nanak
Rajasthan	1. Jodhpur
	2. Rajasthan
	3. Udaipur

LIST OF UNIVERSITIES: STATE WISE AUG. 1970 (*Continued*)

STATE	UNIVERSITIES LOCATED IN THE STATE
Uttar Pradesh	1. Agra 2. Aligarh 3. Allahabad 4. Banaras 5. Gorakhpur 6. Kanpur 7. Lucknow 8. Meerut 9. Roorkee 10. U. P. Agricultural 11. Varanaseya Sanskrit
West Bengal	1. Burwan 2. Calcutta 3. Jadavpur 4. Kalyani 5. North Bengal 6. Rabindra Bharati 7. Visva Bharati
Delhi	1. Delhi 2. Jawaharal Lal Nehru

LIST OF INSTITUTIONS DEEMED TO BE UNIVERSITIES (STATE-WISE)

Bihar	1. Indian School of Mines, Dhanbad
Gujarat	1. Gujarat Vidyapeeth, Ahmedabad
Maharashtra	1. Tata Inst. of Social Sciences, Bombay
Mysore	1. Indian Inst. of Sciences, Bangalore
Rajasthan	1. Birla Inst. of Technology and Science, Pilani
Uttar Pradesh	1. Gurukul Kangri Vishwavidyalaya, Hardwar 2. Kashi Vidyapeeth, Varanasi
Delhi	1. Indian Agricultural Research Inst., New Delhi 2. Jamia Millia Islamia, New Delhi

APPENDIX B

Dates of Establishment and Enrollment—Indian Universities and Institutions Deemed to be Universities: 1968-69

The following list has been extracted from the *Report for the Year 1968-69*, University Grants Commission, New Delhi. For more detailed information the reader is referred to Appendices A and C and especially to the Inter University Board *Handbook*.

Appendices A, B and C have been designed especially for use with the Admission and Placement Recommendations in Chapter IX.

Year of Establishment		*Universities*	*Total Student Enrollment*
1857	(1)	Calcutta University	191,539
	(2)	Bombay University	81,365
	(3)	Madras University	107,680
1887	(4)	Allahabad University	13,918
1916	(5)	Banaras Hindu University (Varanasi)	12,694
	(6)	Mysore University	53,020
1917	(7)	Patna University	12,434
1918	(8)	Osmania University (Hyderabad)	49,014
1921	(9)	Aligarh Muslim University	7,297
	(10)	Lucknow University	23,148
1922	(11)	Delhi University	50,705
1923	(12)	Nagpur University	58,645
1926	(13)	Andhra University (Waltair)	57,726
1927	(14)	Agra University	41,601
1929	(15)	Annamalai University (Annamalainagar)	6,173
1937	(16)	Kerala University (Trivandrum)	106,178
1943	(17)	Utkal University (Bhubaneswar)	25,945
1946	(18)	Saugar University	14,470
1947	(19)	Rajasthan University (Jaipur)	49,087
	(20)	Panjab University (Chandigarh)	152,961
1948	(21)	Gauhati University	51,264
	(22)	Jammu & Kashmir University (Srinagar)	20,039
1949	(23)	Roorkee University	2,305
	(24)	Poona University	53,601
	(25)	M.S. University of Baroda	15,375
	(26)	Karnatak University (Dharwar)	50,850
1950	(27)	Gujarat University (Ahmedabad)	59,894
1951	(28)	S.N.D.T. Women's University (Bombay)	8,098
	(29)	Visva-Bharati (Santiniketan)	1,218
1952	(30)	Bihar University (Muzaffarpur)	45,136
1954	(31)	Sri Venkateswara University (Tirupati)	25,470
1955	(32)	Sardar Patel University (Vallabh Vidyanagar)	10,350
	(33)	Jadavpur University (Calcultta)	5,459
1956	(34)	Kurushetra University (Kurushetra)	3,779
	(35)	Indira Kala Sangit Vishvavidyalaya (Khairagarh)	99
1957	(36)	Vikram University (Ujjain)	27,594
	(37)	Gorakhpur University	29,765

Year of Establishment		*Universities*	*Total Student Enrollment*
	(38)	Jabalpur University	17,962
1958	(39)	Varanaseya Sanskrit Vishvavidyalaya (Varanasi)	909
	(40)	Marathwada University (Aurangabad)	23,995
1960	(41)	U.P. Agricultural University (Nainital)	1,460
	(42)	Burdwan University	36,447
	(43)	Kalyani University	2,109
	(44)	Bhagalpur University	35,338
	(45)	Ranchi University	31,988
1961	(46)	K.S. Darbhanga Sanskrit Vishvavidyalaya	—
1962	(47)	Punjab Agricultural University (Ludhiana)	3,199
	(48)	Punjabi University (Patiala)	7,957
	(49)	Orissa University of Agriculture & Technology (Bhubaneswar)	1,113
	(50)	North Bengal University (Siliguri)	16,699
	(51)	Rabindra Bharati (Calcutta)	1,703
	(52)	Magadh University (Gaya)	36,537
	(53)	Jodhpur University	8,366
	(54)	Udaipur University	6,689
	(55)	Shivaji University (Kolhapur)	37,534
1964	(56)	Indore University	16,215
	(57)	Jiwaji University (Gwalior)	17,514
	(58)	Ravi Shankar University (Raipur)	18,783
	(59)	University of Agricultural Sciences (Bangalore)	1,696
	(60)	Andhra Pradesh Agricultural University (Hyderabad)	2,576
	(61)	Bangalore University	31,423
	(62)	Jawaharlal Nehru Krishi Vishvavidyalaya (Jabalpur)	1,591
1965	(63)	Dibrugarh University	19,791
1966	(64)	Kanpur University	29,674
	(65)	Meerut University	37,698
	(66)	Madurai University	48,477
	(67)	Saurashtra University (Rajkot)	21,394
	(68)	South Gujarat University (Surat)	16,635
1967	(69)	Berhampur University	5,835
	(70)	Sambalpur University	9,595
1968	(71)	Gujarat Ayurveda University (Jamnagar)	1,901
	(72)	Jawahar Lal Nehru University (New Delhi)	—
	(73)	Maharashtra Krishi Vidyapeeth* (Poona)	5,209
	(74)	Calicut University	44,544
	(75)	Awadhesh Pratrap Singh University (Rewa)	9,004
	(76)	Assam Agricultural University (Jorhat)	—

*Since renamed as Mahatma Phule Krishi Vidyapeeth.

*Years of Recognition**		*Institutions Deemed to Be Universities*	*Total Student Enrollment*
1958	(1)	Indian Institution of Science (Bangalore)	868
	(2)	Indian Agricultural Research Institute (New Delhi)	517
1961	(3)	Indian School of International Studies (New Delhi)	157
1962	(4)	Gurukul Kangri Vishvavidyalaya (Hardwar)	241
	(5)	Jamia Millia Islamia (New Delhi)	1,027
1963	(6)	Gujarat Vidyapith (Ahmedabad)	472
	(7)	Kashi Vidyapith (Varanasi)	1,717
1964	(8)	Tata Institute of Social Sciences (Bombay)	146
	(9)	Birla Institute of Technology & Science (Pilani)	2,246
1967	(10)	Indian School of Mines (Dhanbad)	417
		Total	2,143,264

Note:
1. The Universities have been arranged according to the year in which established.
2. The enrollment figures generally indicate the position on August 15, 1968 and include the enrollment in constituent/affiliated collegs of the universities concerned. For Indira Kala Sangit Vishvavidyalaya, Rabindra-Bharati & Varanaseya Sanskrit Vishvavidyalaya, figures related to the university campuses only. Information about enrollment in K.S. Darbhanga Sanskrit Vishvavidyalaya is not available. For the colleges which did not furnish the statistics for 1967-68, the data of the previous year has been used.
3. The total does not include the enrollment in intermediate classes of the colleges affiliated to the Board of High School and Intermediate Education, Uttar Pradesh.

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*Year of recognition as an institution deemed to be a university under Section 3 of the UGC Act, 1956.

APPENDIX C

Affiliated and Constituent Colleges 1970

The following listing has been extracted from *List of Colleges Under Section 2(f) of the U.G.C. Act 1970*, University Grants Commission, New Delhi. For more detailed information the reader is referred to the Inter University Board *Handbook*.

Appendices A, B and C have been designed especially for use with the Admission and Placement Recommendations in Chapter IX.

AGRA UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Adarsh Krishna College, Shikohabad.
2. Bhartiya Municipal Girls' College, Chandausi (on temporary affiliation).
3. Baikunthi Devi Degree College, Agra.
4. Dayanand Arya Kanya Degree College, Moradabad.
5. D.S.M. Degree College, Kanh (Moradabad).
6. Engineering College, Dayalbagh (Agra).
7. Gandhi Faizam College, Shahjahanpur.
8. Gulab Singh Hindu College, Chandpur-Sian (Bijnor).
9. Gunjdundwara College, Gunjdundwara (Etah).
10. G. B. Pant Degree College, Kachla (Badaun).
11. Jawaharlal Nehru Degree College, Etah.
12. Kanya Mahavidyalaya Degree College, Bareilly.
13. Kishori Raman Girls' College, Mathura.
14. Mahatma Gandhi Balika Vidyalaya Degree College, Firozabad, (Agra).
15. National Degree College, Bhagaon (Mainpuri).
16. Rjendra Prasad Degree College, Mirganj (Bareilly), (on temporary affiliation).
17. Radhaswami Educational Institute, Dayalbagh, Agra.
18. R.S.M. Degree College, Dhampur (Bijnor).
19. Sri Chitragupta Degree College, Mainpuri.
20. Smt. B. D. Jain Girls' College, Agra
21. Sahu Gopinath Girls' College, Bareilly.
22. Tika Ram Kanya Mahavidyalaya, Aligarh.
23. Upadhi Mahavidyalaya, Pilibhit (on temporary affiliation).

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

Affiliated Colleges

1. Agra College, Agra.
2. Almora Degree College, Almora.
3. Babu Shiv Nath Agarwal College, Mathura.
4. Bareilly College, Bareilly.
5. C. L. Jain College, Firozabad.
6. Dharam Samaj College, Aligarh.
7. Gokul Dass Hindu Girls' College, Moradabad.
8. Hindu College, Moradabad.

9. Institute of Oriental Philosophy, Vrindavan (Mathura).
10. J. S. Hindu College, Amroha.
11. Kasganj Degree College, Kasganj.
12. K.G.K. College, Moradabad.
13. Kishori Raman College, Mathura.
14. Moti Ram Babu Ram College, Haldwani.
15. Nehru Memorial Shivnaraindas College, Badaun.
16. Narain College, Shikhohabad.
17. P.C. Bagla Degree College, Hathras.
18. Raja Balwant Singh College, Agra.
19. Swami Sukhdeva Nanda College, Mumukshu Ashram, Shahjahanpur.
20. S.R.K. College, Firozabad (Agra).
21. St. John's College, Agra.
22. S.M. College, Chandausi (Moradabad).
23. Sri Virdhaman College, Bijnor.
24. Sri Varshneya College, Aligarh.
25. Sahu Jain College, Najibabad.
26. Womens' Training College, Dayalbagh, Agra.

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. Birla Government Degree College, Srinagar (Garhwal).
2. Government Degree College, Gopeshwar (Chamoli) (on temporary affiliation).
3. Government Degree College, Pithoragarh (on temporary affiliation).

B. COLLEGES TEACHING UP TO POST GRADUATE DEGREE

1. Govt. Raza College, Rampur.
2. Kashi Naresh Goverment College, Gyanpur (Varanasi)
3. Postgraduate College of Animal Sciences, I.V.R.I., Izatnagar
4. S.N. Medical College, Agra.
5. Thakur Deb Singh Bisht Government College, Nainital.
6. U.P. College of Veterinary Sciences and Animal Husbandry, Mathura.

ALLAHABAD UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Associated Colleges

1. Allahabad Degree College, Allahabad.
2. The Chaudhury Mahadeo Prasad College, Allahabad.
3. The Ewing Christian College, Allahabad.
4. The Moti Lal Nehru College of Engineering, Allahabad.

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

Associated College

1. The Allahabad Agricultural Institute, Naini, Allahabad.

Constituent College
1. The Moti Lal Nehru Medical College, Allahabad.

ANDHRA UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges
1. Akkineni Nageswara Rao College, Gudivada.
2. A.M.A.L. College, Anakapalle.
3. Andhra Christian College, Guntur.
4. Andhra Jatheeya Kalasala, Masulipatam.
5. Andhra Loyola College, Vijayawada-8.
6. Andhra Lutheran College of Education, Guntur.
7. Andhra Jateeya Bodhana Kalaocha Machilipatnam (on temporary affiliation).
8. B.G.B.S. Women's College, Naraspur (W.G.D.T.) (on temporary affiliation).
9. Bapatla College of Arts and Science, Bapatla (on temporary affiliation).
10. C.S.R. Sarma College, Ongole (Guntur) (on temporary affiliation).
11. Chintalapati Satyavati Devi St. Theresa's College for Women, Eluru.
12. Chundi Ranganayakulu College, Chilakalurpet, Guntur Dt. (on temporary affiliation).
13. D.N.R. College, Bhimvaram.
14. Dharma Apparao College, Nuzvid P.O. Krishna Distt. (on temporary affiliation).
15. Hindu College, Guntur.
16. Hindu College, Masulipatam.
17. Jesus Mary and Joseph's College for Women, Tenali (Guntur) (on temporary affiliation).
18. Jagarlamudi Kuppuswamy Choudary College, Guntur (on temporary affiliation).
19. Kakaraparti Bhavanavayana College, Vijayawada (on temporary affiliation for 3 years from 1966-67).
20. Maharajah's College for Women, Vizianagram (on temporary affiliation).
21. Maharajah's Training College, Vizianagram (on temporary affiliation).
22. Maris Stella College, Vijayawada (on temporary affiliation).
23. Mrs. A. V. N. College, Visakhapatnam.
24. Maharajahs College, Vizianagram.
25. Nandamuri Taraka Rama Rao College, Nandigamma (on temporary affiliation).
26. Noble College, Machilipatnam (on temporary affiliation).
27. P.B.N. College, Nidubrolu.
28. Pedanamdipadu College of Arts and Sciences, Pedanamdipadu (on temporary affiliation).
29. Raja Vasireddi Venkatadari Nayudu College, Dharmikota Amravati, Guntur Dr. (on temporary affiliation).
30. Rajah R.S.R.K. Ranga Rao College, Bibbili.
31. Rangaraya Medical College, Kakinada (East Godavari) (on temporary affiliation).

32. Sir C. Ramalinga Reddy College, Eluru.
33. S.K.B. Ramar's College Amalapuram, East Godavari Distt.
34. S.R.V.B.S.J.B. Maharanee College, Peddapuram (E.G. Distt.) (on temporary affiliation).
35. S.S.N. College, Narasarapet.
36. St. Joseph's College for Women, Waltair (R.S.).
37. St. Joseph's Training College for Women, Guntur.
38. Smt. Gentela Sukuntalamma College, Jagayyapeta (on temporary affiliation).
39. Sri Kandukuri Rajyalakshmi College for Women, Rajahmmundary (on temporary affiliation).
40. Sri Velagapudi Ramakrishna Memorial College, Nagaram, Repalle Teluk (Guntur) (on temporary affiliation).
41. The Y.N. College, Narsapur.
42. V.S.M. College, Ramachandra Puram (East Godavari) (on temporary affiliation).
43. V.R.S. & Y.R.N. College, Chirala.
44. V.S.R. College, Tenali.

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. Annavaram Satyavathi Devi Government College for Women, Kakinada (on temporary affiliation).
2. College of Engineering, Kakinada.
3. D. R. Goenka Government Arts and Science College, Tadepalligendem (on temporary affiliation for 3 years from 1967-68).
4. Dr. V. S. Krishna Govt. Arts and Science College, Visakhapatnam (on temporary affiliation).
5. Government Arts and Science College (Women) Srikakulam (on temporary affiliation).
6. Government Arts and Science College, Razole (E.G.D.T.).
7. Government Arts College, Rajahmundry.
8. Government Arts College, Srikakulam (on temporary affiliation).
9. Government Arts and Science College, Macherla (on temporary affiliation for 3 years from 1967-68.).
10. Government College for Women, Guntur (on temporary affiliation).
11. M.R. Government Sanskrit College, Vizianagram.
12. P.R. (Government) College, Kakinada (on temporary affiliation).
13. S.R.R. & C.V.R. (Government) College, Vijayawada.
14. Shri Addepally Satyanarayana Murthy Government Arts and Science Palakol (on temporary affiliation).
15. S.C.I.M. Government Arts and Science College, Tanku (W.G.Dt.) (O.T.A.).
16. Y.A. Government College for Women, Chirala (on temporary affiliation).

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

1. Andhra Medical College, Visakhapatnam.
2. Government Training College, Rajahmundry.
3. Medical College, Guntur.

ANDHRA PRADESH AGRICULTURAL UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

University Colleges

1. Agricultural College, Bapatla, Shri.
2. College of Home Science, Hyderabad.
3. Sri Venkateswara Agricultural College, Tirupati.
4. College of Agriculture, Rajendranagar, Hyderabad.
5. College of Veterinary Science, Hyderabad.
6. College of Veterinary Science, Tirupati.

AWADHESH PRATAP SINGH UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Arts College, Amarpatan (on temporary affiliation).
2. Arts and Commerce Degree College, Hanumana (on temporary affiliation).
3. Arts and Science College, Sirmour (on temporary affiliation).
4. Arts Degree College, Semaria (Rewa) (on temporary affiliation).
5. Arts and Commerce College, Beohasi (on temporary affiliation).
6. Bapu Degree College, Nowgang, Distt. Chhatapur (on temporary affiliation).
7. Chhatrasal Muncipal Degree College, Maharajpur (on temporary affiliation).
8. Dahya Bhai Chudasama Law College, Panna (on temporary affiliation).
9. Degree College, Niwari (on temporary affiliation).
10. Girls Arts Degree College, Chhatarpur (on temporary affiliation).
11. Janta College, Nagod (on temporary affiliation).
12. Kamla Nehru Girls Degree College, Satna (on temporary affiliation).
13. Law College, Sidhi (on temporary affiliation).
14. Law College, Satna (on temporary affiliation).
15. Law College, Shahdol (on temporary affiliation).
16. Law College, Tikamgarh (on temporary affiliation).
17. Motilal Nehru Law College, Chattarpur (on temporary affiliation).
18. Maharaja Martand Degree College, Kotma Distt. Shahdol (on temporary affiliation).
19. Nehru Smarak Mahavidyalaya, Chakghata (on temporary affiliation).
20. Nehru Smarak Degree College, Burhar (Shahdol) (on temporary affiliation).
21. Pushapraj Degree College, Waidhan (Sidhi) (on temporary affiliation).
22. Sudarshan Mahavidyalaya, Lalgaon (on temporary affiliation).
23. Swami Vivekanand Mahavidyalaya, Teonthar (Rewa) (on temporary affiliation).
24. Shaheed Kedarnath Degree College, Mouganj (on temporary affiliation).

B. COLLEGE TEACHING UP TO POSTGRADUATE DEGREE

Affiliated College

1. Vanijya Mahavidyalaya, Satna (on temporary affiliation).

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. Government Engineering College, Rewa (on temporary affiliation).
2. Government Sanskrit Degree College, Rewa.
3. Shyam Shah Medical College, Rewa, (on temporary affiliation up to 1970-71).

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

1. Chhatrasal Govt. College, Panna (M.A. in Political Science for 5 years w.e.f. 1966-67 and permanently affiliation in respect of degree classes w.e.f. 1966-67).
2. Government College, Shahdol.
3. Government College of Education, Chhatarpur.
4. Government College of Education, Rewa.
5. Government Science College, Rewa.
6. Government College, Satna.
7. Government College, Tikamgarh.
8. Government College, Sidhi (on temporary affiliation for M.Sc. Mathematics).
9. Government Girls College, Rewa.
10. Maharaja College, Chhatarpur.
11. Thakur Ranmat Singh Arts College, Rewa.

BANARAS HINDU UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Colleges admitted to the privileges of the University

1. Arya Mahila Degree College, Chetganj, Varanasi, (B.A. 3 year Degree Course).
2. Dayanand Mahavidyalaya, Varanasi. (P.U.C. Arts, B.A., B.Com. 3 year Degree Course).
3. Vasant Kanya Mahvidyalaya, Kamachha (Varanasi). (P.U.C. Arts & B.A. 3 year Degree Course).
4. Vasanata College for Women, Raj Ghat, Varanasi, (P.U.C. Arts, B.A. 3 year Degree Course).

BANGALORE UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Constituent Colleges

1. Acharya Pathsala College of Arts & Commerce, Bangalore (on temporary affiliation).
2. B.M. Shreenivasiah College of Engineering, Bangalore (on temporary affiliation).
3. B.M.S. College of Law, Bangalore (on temporary affiliation) .
4. B.M.S. College for Women, North Anjaneya Temple Street, Basavanagudi, Bangalore-4 (on temporary affiliation).

5. Sri Nijalingappa College, Bangalore, L.K.L.E. Society's.
6. M.E.S. Teachers' College, Malleswaram, Bangalore (on temporary affiliation).
7. M.E.S. College of Arts & Commerce, Malleswaram, Bangalore (on temporary affiliation for Arts and permanent affiliation for Commerce course).
8. Mount Carmel College, Bangalore (on temporary affiliation for Science and permanent affiliation for Arts).
9. M.S. Ramaiah College of Engineering, Bangalore (on temporary affiliation).
10. National College, Basavanagudi, Bangalore.
11. Rashtreeya Vidyalaya Teachers' College, Bangalore.
12. R.V. College of Engineering, Bangalore (on temporary affiliation).
13. Shri Renukacharya College of Science, Bangalore.
14. Shri Renukacharya College of Law, Bangalore (on temporary affiliation).
15. St. John's Medical College, Bangalore (on temporary affiliation).
16. St. Joseph's College, Bangalore (permanent affiliation for Arts & Science courses and temporary affiliation for Commerce Courses).
17. The National College, 7th Block, Jayanagar, Bangalore (on temporary affiliation).
18. Vijaya College, Bangalore.
19. Vijaya Teachers' College, Bangalore (on temporary affiliation).

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

University Colleges

1. Central College, Bangalore.
2. Visvesvaraya College of Engineering, Bangalore.

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. Government College, Bangalore.
2. Government College of Pharmacy, Lal Bagh Road, Bangalore-27 (on temporary affiliation).
3. Maharani's College for Women, Bangalore.
4. Ramnarayan Chellaram College of Commerce, Bangalore.
5. Sri Krishnarajendra Silver Jubilee Technological Institute, Bangalore.

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

1. Bangalore Medical College, Bangalore.
2. Dental College, Bangalore.
3. Government College of Law, Bangalore.
4. V.H.D. Central Institute of Home Science, Bangalore (on temporary affiliation).

BERHAMPUR UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated College

1. Bhanjanagar College, Bhanjanagar (Ganjam).

2. D.A.V. College, Koraput (Orissa).
3. Hinjilicut Science College, Hinjilicut (Ganjam).
4. Ramachandra Mardaraj College, Khalikote (Ganjam).
5. Raya Goda College, Raya Goda (Koraput).
6. Science College, Aska.

B. COLLEGE TEACHING UP TO POSTGRADUATE DEGREE

Affiliated College

1. Khallikote College, Berhampur (Ganjam).

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. Government Evening College, Berhampur (Ganjam).
2. Government Medical College, Berhampur (Ganjam).
3. Government Science College, Phulbani (Phulbani).
4. Government Women's College, Berhampur (Ganjam).
5. S.K.C.G. College, P.O. Parala-Khimundi (Ganjam).
6. Vikram Dev College, Jeypore (Koraput).

BHAGALPUR UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Ayodhya Prasad Singh Memorial College, Barauni (Monghyr) (on temporary affiliation).
2. Badri Narain Mukteshwar College, Berahiya (Monghyr) (on temporary affiliation).
3. Balmiki Rajniti Mahila Mahavidyalaya, Monghyr (on temporary affiliation).
4. Bharat Sevak Samaj College, Supaul (Saharsa) (on temporary affiliation).
5. Bhagalpur Evening College, Bhagalpur (on temporary affiliation).
6. Darshan Sah College, Kaithar (Purnea).
7. Deoghar College, Deoghar (S.P.).
8. Forbesganj College, Forbesganj (on temporary affiliation).
9. Gajadhar Bhagat College, Naugachhia (Bhagalpur) (on temporary affiliation).
10. Ganesh Dutt College, Begusarai (Monghyr).
11. Godda College, Godda (.SP.).
12. Gorelal Mehta College, Banmankhi (Purnea) (on temporary affiliation).
13. Harihar Saha College, Uda Kishunganj (Saharsa) (on tempoarry affiliation).
14. Hari Singh Mahavidyalaya, Haveli Kharagpur (Monghyr) (on temporary affiliation).
15. Jamtara College, Jamtara (S.P.) (on temporary affiliation).
16. Jagjiwan Ram Sharmik Mahavidyalaya, Jamalpur (Monghyr) (on temporary affiliation).
17. Jai Prakash College, Narainpur (Bhagalpur).

18. Jhajha Evening College, Jhajha (on temporary affiliation).
19. Jyoti Misri Singh College, Monghyr (on temporary affiliation).
20. Kabir Moti Darshan College, Parbatta (Monghyr) (on temporary affiliation).
21. Khublal Deochand Sahu College, Gogri (Monghyr) (on temporary affiliation).
22. Koshi College, Khagaria (Monghyr).
23. Kumar Kalika Memorial College, Jamui (Monghyr).
24. Kumar Kalidas Memorial College, Pakur (S.P.) (on temporary affiliation).
25. Karyanand Sharma Smarak Mahavidyalaya, Lakhisarai (Monghyr) (on temporary affiliation).
26. Marwari College, Bhagalpur.
27. Marwari College, Kishan Ganj (Purnea) (on temporary affiliation).
28. Mohan Lal Jeloka Memorial Mahila College, Kaithar (Purnea) (on temporary affiliation).
29. Murarka College, Sultanganj (Bhagalpur).
30. Nirmali College, Nirmali (on temporary affiliation).
31. Pandit Baliram Sharma College, Banka (Bhagalpur) (on temporary affiliation).
32. Purnea College, Purnea.
33. Ramdeo Sharda Mahavidyalaya, Salmari (on temporary affiliation).
34. Ram Swarath College, Tarapur (Monghyr) (on temporary affiliation).
35. Ramchiritra Singh College, Marjhaul (Monghyr) (on temporary affiliation).
36. Saharsa College, Saharsa.
37. Sahibganj College, Sahibganj (S.P.).
38. Santhal Pargana College, Dumka (S.P.).
39. Sri Krishna Ramruchi College, Barbigha (Monghyr).
40. Sri Kishna Mahila Mahavidyalaya, Begusarai, Monghyr (on temporary affiliation).
41. Tej Narain Banaili Law College, Bhagalpur.
42. Thakur Prasad College, Madhepura (Saharsa).

University Colleges

1. Raja Deokinandan & Diamond Jubilee College, Monghyr.
2. Sundravati Mahila Mahavidyalaya, Bhagalpur.
3. Tej Naryan Benaili College, Bhagalpur.

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. Bhagalpur College of Engineering, Bhagalpur (on temporary affiliation).
2. Teacher's Training College, Bhagalpur.
3. Teacher's Training College, Deoghar (on temporary affiliation).

B. COLLEGE TEACHING UP TO POSTGRADUATE LEVEL

1. Bihar Agricultural College, Sabour (Bhagalpur).

BIHAR UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Acharya Narendra Deva College, Sahpur Patori, Darbhanga (on temporary affiliation)..
2. Dalshringar Baldeo College, Jaynagar (Darbhanga) (on temporary affiliation).
3. D.A.V. College, Siwan (Saran).
4. Dr. S.K. Sinha Women's College, Motihari (on temporary affiliation).
5. Garhi Mehanth Rameshwar Dass College, Mohanpur (on temporary affiliation).
6. Ganga Singh College, Chapra (on temporary affiliation).
7. Gopalganj College, Gopalganj (on temporary affiliation for B.A. & B.Sc. (Pass) Standard).
8. Gopeshwar College, Hathwa (Chapra) (on temporary affiliation for B.A. courses and for B.Sc. (Pass) standard).
9. Hoti Lal Ram Nath College, Amnour (Saran) (on temporary affiliation).
10. Jagannath Singh College, Chandauli (Muzaffarpur) (on temporary affiliation).
11. Jagdam College, Chapra.
12. Jagdish Nandan College, Madhubani (on temporary affiliation).
13. Janta College, Jhanjharpur (Darbhanga) (on temporary affiliation).
14. Jaya Prakash Mahila College, Chapra (on temporary affiliation).
15. Lakshmi Narayan College, Bhagwanpur (Muzaffarpur) (on temporary affiliation).
16. Laxmi Narain Dubey College, Motihari (on temporary affiliation).
17. Mahila Shilakala Bhawan College, Muzaffarpur (on temporary affiliation).
18. Mahanth Sheo Shankar Giri College, Areraj (Champaran) (on temporary affiliation).
19. Maharaja Laxmishar Singh College, Sarisabpahi (Darbhanga) (on temporary affiliation).
20. Maharani Rameshwari Mahila Mahavidyalaya, Darbhanga (on temporary affiliation).
21. Marwari Mahavidyalaya, Darbhanga (on temporary affiliation).
22. Milat College, Laheriasarai (Darbhanga) (on temporary affiliation).
23. Munshi Sigh College, Motihari.
24. M.J.K. College, Betiah (Champaran).
25. Prabhunath College, Parsa (Saran) (on temporary affiliation).
26. Rashnarayan College, Pandual (Darbhanga) (on temporary affiliation).
27. Rajnarain College, Hajipur (Muzaffarpur).
28. Rameshwar Mahavidyalaya, Muzaffarpur (on temporary affiliation).
29. Ram Bilas Ganga Ram College, Maharaj Ganj (Saran) (on temporary affiliation).
30. Ram Krishna College, Madhubani (Darbhanga).
31. Ramashray Baleshwar College (Dalsingsarai) (on temporary affiliation).
32. Rosera College, Rosera (Darbhanga) (on temporary affiliation).
33. S.K.J. Law College, Muzaffarpur.
34. S.R.K. Goenka College, Sitamarhi (Muzaffarpur).

35. Samastipur College, Samastipur (Darbhanga).
36. Shree Raghav Prasad Singh College, Jaintpur (Muzaffarpur) (on temporary affiliation).

Constituent Colleges

1. Mahanth Darsan Das Mahila College. Muzaffarpur.
2. Rejendra College, Chapra.
3. Ram Dayalu Singh College, Muzaffarpur.

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

Constituent Colleges

1. C.M. College, Darbhanga.
2. Langat Singh College, Muzaffarpur.

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. Muzaffarpur Institute of Technology, Muzaffarpur.
2. Teachers' Training College, Turki (Muzaffarpur).
3. Teachers' Training College, Samastipur (Darbhanga).
4. Tirhut College of Agriculture, Tirhut-Dholi (Muzaffarpur).

B. COLLEGE TEACHING UP TO POSTGRADUATE DEGREE

1. Darbhanga Medical College, Laheriasarai (Darbhanga).

BOMBAY UNIVERSITY

NON-GOVERNMENT COLLEGES

A. CONSTITUENT (AFFILIATED) COLLEGES TEACHING DEGREE COURSES AND ENROLLING STUDENTS FOR POSTGRADUATE COURSES.

1. Bombay Teachers Training College, Bombay (on temporary affiliation for 2 years w.e.f. 16-6-1969).
2. Carmel College for Women, Nuvem, Goa (on temporary affiliation for two years w.e.f. 20-6-68).
3. D.E. Society's Kirti M. Doongursee College of Arts and Science, Dadar, Bombay-28.
4. D.G. Ruparel College, Tulsi Pipe Road, Bombay-16.
5. Goa Education Society's Dhempe College of Arts and Science, Panaji (Goa).
6. Hazarimal Somani College of Arts & Science, Chowpatty, Bombay-7.
7. H.R. College of Commerce and Economics, Dinshaw Wacha Road, Church Gate, Bombay-1 (on temporary affiliation for two years w.e.f. 20-6-69).
8. Hansraj Jivandas College of Education, Kher, Bombay (on temporary affiliation for 2 years w.e.f. 16-6-69).
9. Jai Hind College, Bombay-1.
10. Kishanchand Chellaram College, Dinshaw Wacha Road, Bombay-1.
11. Kishanchand Chellaram Law College, Bombay-1.
12. Khalsa College, Matunga, Bombay-19.

13. K.J. Somaiya College of Arts & Science, Ghatkopar, Bombay-77 (on temporary affiliation for two years w.e.f. 20-6-69).
14. Khair-ul-Islam Higher Education Society, Maharashtra College of Arts and Science, Byculla, Bombay (on temporary affiliation for two years w.e.f. 16-6-1969).
15. Maharshi Dayanand Education Society's College of Arts and Science, Parel, Bombay-12 (on temporary affiliation for three years, w.e.f. 20-6-1968).
16. Mithibai College of Arts and Chauhan Institute of Science, Vile-Parle (West), Bombay-56 (on temporary affiliation for three years. w.e.f. 20-6-1969).
17. M.L. Dahanukar College of Commerce, Vile-Parle (East), Bombay-57 (on temporary affiliation for 3 years, w.e.f. 20-6-1969)
18. M.M. College of Arts and N.M. Institute of Science (Bhavan's College), Andheri, Bombay-69 (on temporary affiliation for three years w.e.f. 20-6-1969).
20. Noss Senhora da Piedade Institute of Education, Ranaji (Goa) (on temporary affiliation for two years, w.e.f. 20-6-1968).
21. Parle College, Vile-Parle (East), Bombay-57 (on temporary affiliation for three years, w.e.f. 20-6-1968).
22. Ramnarain Ruia College, Matunga, Bombay-19.
23. Ramniranjan Jhunjhunwala Arts & Science College, Ghatkopar, Bombay-77 (on temporary affiliation for two years w.e.f. 20-6-1969).
24. Rishi Dayaram and Seth Hassaram National College and Seth, Wassiamul Assomul Science College, Bandra, Bombay-50, (on temporary affiliation for 2 years w.e.f. 20-6-1969).
25. R.A. Podar College of Commerce and Economics, Bombay-19.
26. Sadhana School of Educational Research & Training, near Lion's Park, Juhu Road, Santa Cruz (West) Bombay-54 (on temporary affiliation for two years, w.e.f. 20-6-1968).
27. Sardar Patel College of Engineering, Andheri, Bombay (on temporary affiliation for 2 years, w.e.f. 20-6-1967).
28. Seth Gordhandas Sundandas Medical College, Parel, Bombay-12 (on temporary affiliation for two years w.e.f. 20-6-1969).
29. Seth Laherchand Uttam Chand College of Arts and Sir Mathuradas Vissonji College of Science, Andheri (East), Bombay-69 (on temporary affilation for two years, w.e.f. 20-6-1968).
30. Siddharth College of Arts and Science, Anand Bhavan, Dr. Dadabhai Nawroji Road, Fort, Bombay-1.
31. Siddarth College of Commerce and Economics, Bombay-1 (on temporary affiliation for 2 years, w.e.f. 20-6-1969).
32. Siddarth College of Law, Bombay.
33. Shri Chinai College of Commerce and Economics, Andheri, Bombay-69 (on temporary affiliation for two years, w.e.f. 20-6-68).
34. Smt. Parvatibai Chowgule Cultural Foundation's College of Arts and Science, Margao (Goa) (on temporary affiliation for two years, w.e.f. 20-6-69).
35. Smt. Mithibai Moti Ram Kundnani College of Commerce and Economics, Bandra, Bombay.
36. Sophia College for Women, Bhulabhai Desai Road, Bombay-26.
37. St. Xavier's College, Cruickshank Road, Bombay-1.

38. St. Xavier's College, Mapuca, Goa (on temporary affiliation for 2 years, w.e.f. 20-6-1969).
39. St. Xavier's Institute of Education, 15, New Marine Lines, Bombay-1.
40. South India Education Society's College of Arts and Science, Sion, Bombay-22.
41. The Chikitsak Samuha Sir Sitaram and Lady Shantabai Patkar College of Arts and Science, Goregaon (West), Bombay-62 (on temporary affiliation).
42. The Nair Hospital Dental College, Lamington Road (North), Bombay-8 (on temporary affiliation for three years, w.e.f. 20-6-1969).
43. The New Law College, Matunga, Bombay-19.
44. Topiwala National Medical College, Lamington Road (North) Bombay-8 (on temporary affiliation for 2 years w.e.f. 20-6-1969).
45. V.J. Technical Institute, Matunga, Bombay-19.
46. Wilson College, Chowpatty, Bombay-7.

GOVERNMENT COLLEGES

A. CONSTITUENT GOVERNMENT COLLEGES TEACHING DEGREE COURSES AND ENROLLING STUDENTS FOR POSTGRADUATE COURSES.

1. College of Nursing, Bombay-8 (on temporary affiliation for 2 years, w.e.f. 20-6-1968).
2. Elphinstone College, Bombay-1.
3. Goa Medical College, Panaji (Goa) (on temporary affiliation up to 19-6-1970).
4. Goa College of Pharmacy, Panaji (Goa) (on temporary affiliation for 3 years, w.e.f. 20-6-1969).
5. Government Dental College and Hospital, St. George's Hospital Compound, Bombay-1.
6. Government Law College, Bombay-1.
7. Grant Medical College, Bombay-8.
8. Institute of Science, Bombay-1.
9. Ismail Yusuf College, Jogeshwari, Bombay-60.
10. Lokmanya Tilak Municipal Medical College, Sion, Bombay (on temporary affiliation) .
11. Secondary Training College, Bombay-1.
12. Sir J. J. College of Architecture, Dr. Dadabhai Nowroji Road, Fort, Bombay-1 (on temporary affiliation up to 20-6-70).
13. Sydenham College of Commerce and Economics, Bombay-1.

BURDWAN UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Abhedananda Mahavidyalaya, Sainthia (Birbhum).
2. Aghorekamini Prakash Chandra Mahavidyalaya, P.O. Bengai (Hooghly).
3. Asansol Girl's College, Asansol (Burdwan).
4. Bankura Sammilani College, Bankura.

5. Bankura Sammilani College, Bankura.
6. Banwarilal Bhalotia College, Asansol (Burdwan).
7. Bidhan Chandra College, Asansol (Burdwan).
8. Bejoynarayan Mahavidyalaya, P.O. Itachuna (Hooghly).
9. Bolpur College, Bolpur (Birbhum).
10. Burdwan Raj College, Burdwan.
11. Gushkara Mahavidyalaya, Gushkara (Burdwan).
12. Hooghly Women's College, Hooghly.
13. Jagannath Kishore College, Purulia.
14. Kalna College, Kalna (Burdwan).
15. Katwa College, Katwa (Burdwan).
16. Krishna Chandra College, Hetampur (Birbhum).
17. Maharajadhiraj Udaychand College for Women, Burdwan.
18. Netaji Mahavidyalaya, Arambagh (Hooghly).
19. Nistarini College, Purulia.
20. Raghunathpur College, Raghunathpur (Purulia).
21. Raja Rammohun Roy Mahavidyalaya, Radhanagar, P.O. Nangulpara (Hooghly)
22. Ramananda College, Bishnupur (Bankura).
23. Rampurhart College, P.O. Rampurhat (Birbhum).
24. Regional Engineering College, Durgapur (Burdwan).
25. Saldiha College, P.O. Saldiha, Bankura.
26. Shambhu Nath College, Labpur (Birbhum).
27. Sonamukhi College, P.O. Sonamukhi (Bankura).
28. Sreegopal Banerjee College, Bagati, P.O. Magra (Hooghly).
29. Sri Ramkrishna Sarada Vidyamahapitha, P.O. Kamarpukur (Hooghly).
30. Suri Vidyasagar College, Suri (Birbhum).
31. Syamsunder College, Syamsunder (Birbhum).
32. Trivenidevi Bhalotia College, Raniganj (Burdwan).
33. Vivekananda Mahavidyalaya, Burdwan.
34. Vivekananda Mahavidyalaya, Haripal, Hooghly.

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. Chandernagore College, Chandernagore (Hooghly).
2. Government Training College, Hooghly.
3. Teachers Training College for Women, Purulia.

B. COLLEGE TEACHING UP TO POSTGRADUATE DEGREE

1. Hooghly Mohsin College, Chinsura (Hooghly).

CALCUTTA UNIVERSITY
NON GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Acharya Prafullachandra College, New Barrackpur (24 Parganas).
2. Acharya Prafullachandra College of Commerce, New Barrackpur (24 Parganas).

3. Amta Ramsaday College, P.O. Amta (Howrah).
4. All Bengal Teachers Training College, Calcutta-13.
5. Anandamohan College, Calcutta-9.
6. Asutosh College, Calcutta-26.
7. Birla College of Science and Education, Calcutta.
8. Bajkul Milani Mahavidyalaya, Bajkul (Midnapore).
9. Bagnan College, Bagnan (Howrah).
10. Baishnavghata Dinabandhu Andrews College, P.O. Garia (24 Parganas).
11. Bangabasi College, Calcutta-9.
12. Bangabasi College of Commerce, Calcutta-12.
13. Bangabasi Evening College, Calcutta-9.
14. Bankim Sardar College, Tangrakhali (24 Parganas).
15. Bangabasi Morning College, Calcutta-9.
16. Barrackpore Rashraguru Surendranath College, P.O. Barrackpore (24 Parganas).
17. Barisha Vivekananda College, Barisha, Calcutta-8.
18. Basantidevi Women's College, Calcutta-29.
19. Basirhat College, P.O. Basirhat (24 Parganas).
20. Behala College, Calcutta-34.
21. Behala College of Commerce, Paransree, Calcutta-34.
22. Belda College, Midnapore.
23. Belonia College, Belonia (Tripura).
24. Belur Ramakrishna Mission Sikshan Mandir, P.O. Belur, Howrah.
25. Bengal Music College, Calcutta-29.
26. Berhampore Girl's College, P.O. Berhampore (Murshidabad).
27. Berhampore Krishnath College, P.O. Berhampore (Murshidabad).
28. Berhampore Union Christian Training College, P.O. Berhampore (Murshidabad).
29. Bhatter College, P.O. Dantan (Midnapore).
30. Bhairab Ganguly College, Belgharia, Calcutta-56.
31. Bidhan Chandra College, P.O. Rishra (Hooghly).
32. Bhowanipore Education Society College, Calcutta.
33. Bon-Hooghly College of Commerce, Calcutta-35.
34. Bongon Dinabandhu Mahavidyalaya, P.O. Bongaon (24 Parganas).
35. Brahmananda Keshab Chandra College, Calcutta-35.
36. Calcutta Girl's B.T. College, Calcutta-19.
37. Calcutta Girls' College (Evening), Calcutta-13.
38. Charuchandra College, Calcutta-29.
39. Chitranjan College, R.K. Ghosal Road, Kasba, Calcutta-42.
40. City College, Calcutta-9.
41. City College of Commerce and Business Administration, Calcutta-12.
42. Contai Prabhat Kumar College, P.O. Contai (Midnapore).
43. Deshbandhu College for Girls, 58/A, Sadananda Road, Calcutta-26.
44. Dhrubachandra Haldar College, P.O. Dakshin Barasat (24 Pargans).
45. Dukhulal Nibaran Chandra College, Aurangabad (Murshidabad).
46. Dum Dum Motijheel College, Calcutta-28.
47. Dum Dum Sarojini Naidu College for Women, Dum Dum, Calcutta-28.
48. Egra Sarada Shashi Bhusan College, P.O. Egra (Midnapore).
49. Fakirchand College, Diamond Harbour (24 Pargans).
50. Gurdas College of Commerce, Calcutta.
51. Garhbeta College, Garhbeta (Midnapore).

52. Ghatal Rabindra Satabarsiki Mahavidyalaya, P.O. Ghatal (Midnapore).
53. Gobardanga Hindu College, Gobardanga (24 Parganas).
54. Gandhi Centenary B.T. College, Habra.
55. Gopal Chandra Memorial B.T. College, New Barrackpur (24 Paraganas).
56. Gokhale Memorial Girls' College, Calcutta-20.
57. Gurudas College, Calcutta-11.
58. Harimohan Ghosh College, Calcutta-24.
59. Heramba Chandra College, Calcutta-19.
60. Hiralal Mazumdar Memorial College for Women, Dakshineswar, Calcutta-35.
61. Howrah Girls' College, Howrah.
62. Howrah Narasinha Dutt College, Howrah.
63. Jangipur College, Jangipur (Murshidabad).
64. Jiganj Sripat Singh College, P.O. Jiganj (Murshidabad).
65. Jogamaya Devi College, 9, Shyama Prasad Mukherjee Road, Calcutta-26.
66. Jogesh Chandra Chaudhuri College, Calcutta-23.
67. Kaibalyadayini College of Commerce, Midnapore.
68. Kailashahar Ram Krishna Mahavidyalaya, Kailashahar, Tripura.
69. Kandi Raj College of Commerce, P.O. Kandi (Murshidabad).
70. Kandi Raj College of Commerce, P.O. Kandi (Murshidabad).
71. Karimpur Pannidevi College, P.O. Karimpur, Nadia.
72. Kharagpur College, Khargpur (Midnapore).
73. Khudiram Bose Central College, Calcutta-6.
74. Kidderpore College, Calcutta-23.
75. Krishnagar College of Commerce, Krishnagar (Nadia).
76. Krishnagar Girls' College, Krishnagar (Nadia).
77. K.K. Das College of Commerce, Baishnabghata P.O. Garia (24 Parganas).
78. Lal Baba College, Bally, Howrah.
79. Loreto College, Calcutta-16.
80. Maharaja Manindra Chandra College, Calcutta-3.
81. Maharani Kashiswari College, Calcutta-3.
82. Maharaja Srischandra ollege, Calcutta-3.
83. Mahadevanand Mahavidyalaya, Manirampur, Barrackpur (24 Parganas).
84. Mahishadal Raj College, P.O. Mahishadal (Midnapore).
85. Midnapore College, Midnapore.
86. Mrinalini Datta Mahavidyapith, Birati, Calcutta-51.
87. Mugberia Ganga Dhar Mahavidyalaya, P.O. Mugberia (Midnapore).
88. Muralidhar Girls' College, Calcutta-19.
89. Mahishadel Girls College, Mahishadel (Distt. Midnapore).
90. Nand Lal Ghosh B.T. College, P.O. Naihati (24 Pargana).
91. Nabadwip Vidyasagar College, P.O. Nabadwip (Nadia).
92. Nabagram Hiralal Paul College, P.O. Nabagram (Konnagar) Hooghly.
93. Naihati Rishi Bankim Chandra College, P.O. Naihati (24 Parganas).
94. Narajole Raj College, P.O. Narajole, Midnapore.
95. New Alipore College, L-Block, New Alipore, Calcutta-33.
96. Netaji Nagar College, Calcutta.
97. Panskura Banamali College, P.O. Panskura (Midnapore).
98. Pingla Thana Mahavidyalaya, P.O. Maligram (Midnapore).
99. Prabhu Jagat Bandhu College, P.O. Andul Mouri (Howrah).
100. Prafulla Chandra College, Calcutta-19.

101. P.N. Das College, Santinagar (24 Parganas).
102. Purash Kanpur Haridas Nandi Mahavidyalaya, P.O. Kanpur, Howrah.
103. Raja Krishnath College of Commerce, Berhampore (Murshidabad).
104. Raja Peary Mohan College, P.O. Uttarpara (Hooghly).
105. Raja Narendralal Khan Women's College, Midnapore.
106. Ram Thakur College, Agartala.
107. Ramakrishna Mission Residential College, Narendrapur (24 Parganas).
108. Ramkrishna Mission Vidyamandir, Belurmath (Howrah).
109. Ramakrishna Sarda Mission Vivekananda Vidya Bhavan, 33, Nayapatty Road, Calcutta-28.
110. Ram Mohan College, 102/1, Amherst Street, Calcutta-9.
111. Ranaghat College, P.O. Ranaghat (Nadia).
112. Rani Birla Girls' College, Calcutta-19.
113. Rani Dhanya Kumari College of Commerce, Jiaganj, Murshidabad.
114. Sanitpur College, P.O. Santipur (Nadia).
115. Scottish Church College, Calcutta-6.
116. Serampore College, Serampore (Hooghly).
117. Seth Anandram Jaipuria College, Calcutta-5.
118. Seth Soorajmal Jalan Girls' College, Calcutta-7.
119. Sevayatan Sikhshan Mahavidyalaya, Jhargram, Midnapore.
120. Seknarayan Rameshwar Fatepuria College, Beldanga (Murshidabad).
121. Seva Bharati Mahavidyalaya, P.O. Kapgari (Midnapore).
122. Shyampur Sidheswari Mahavidyalaya, P.O. Anantapur, Howrah.
123. Sibnath Sastri College, 23/49, Gariahat Road, Calcutta-19.
124. Sibpur Dinabandu Institution (College), Howrah.
125. Sitanda College, Nandigram (Midnapore).
126. South Calcutta Girls' College, Calcutta-25.
127. Sri Chaitanya College, Habra (24 Parganas).
128. Sri Chaitanya College of Commerce, Habra, 24 Parganas.
129. Srikrishna College, Bagoola (Nadia).
130. Sri Sikshyatan College, Calcultta-16.
131. St. Paul's C. M. College, Calcutta-9.
132. St. Xavier's College, Calcutta-16.
133. Sudhiranjan Lahiri Mahavidyalaya. P.O. Majdia (Nadia).
134. Sunarban Hazi Desarat College, P.O. Pathankhali Via Canning (24 Parganas).
135. Sundarban Mahavidyalaya, Kakdwip (24 Parganas).
136. Surendranath College, Calcutta-9.
137. Susilkar College, Ghoshpur, P.O. Champahati.
138. Surnedranath Evening College, Calcutta-9.
139. Surendranath College for Women, Calcutta-9.
140. Syamaprasad College, 9, Syamaprasad Mukherjee Road, Calcutta-26.
141. Tamralipta Mahavidyalaya, P.O. Tamluk (Midnapore).
142. Uluberia College, P.O. Uluberia (Howrah).
143. Umeschandra College, Calcutta-12.
144. Victoria Institution for Girls, Calcutta-9.
145. Vidyanagar College, Vidyanagar, P.O. Charashyamdas (24 Parganas).
146. Vidyasagar College, Calcutta-6.
147. Vidyasagar Evening College, Calcutta-6.
148. Vidyasagar College for Women, Calcutta-6.
149. Vihari Lal College of Home Science, Calcutta-27.

150. Vijoygarh Jyotish Roy College, Calcutta-32.
151. Vidyasagar Teachers Training College, Midnapore.
152. Vivekananda Centenary College, Rahara (24 Parganas).
153. Vivekananda Satavarshiki Mahavidyalaya, P.O. Manikpara (Midnapore).
154. Vivekananda College for Women, Barisha, Calcutta-8.
155. Vivekananda Mission Mahavidyalaya, Vivekanagar, P.O. Barbasuderpur (Midnapur).
156. Yogada Satsanga Palpara Mahavidyalaya, P.O. Palpara (Midnapore).
157. Women's Christian College, Calcutta-26.
158. Women's College, Calcutta-6.

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

Affiliated College

1. Surendramath Law College, Calcutta-9.

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. Bankura Samilani Medical College, Bankura.
2. Barasat Government College, Barasat (24 Parganas).
3. Bengal Veterinary College, Belgachia, Calcutta-37.
4. Bethune College, 181, Cornwallis Street, Calcutta-6.
5. Biri Bikram Evening College, Agartala (Tripura).
6. B.T. (S.T.T.) College, Agartala (Tripura).
7. Dr. R. Ahmed Dental College, 114, Lower Circular Road, Calcutta-14.
8. College of Ceramic Technology, Calcutta-10.
9. College of Leather Technology, Canal South Road, Calcutta-15.
10. College of Textile Technololgy, Berhampore (Murshidabad).
11. College of Textile Technology, Serampore, Hooghly.
12. David Hare Training College, 25/3, Ballygunge Circular Road, Calcutta-19.
13. Goenka College of Commerce and Business Administration, 210, Bowbazar Street, Calcutta-12.
14. Hindi Teachers Training College, Agartala, Tripura.
15. Institute of Education for Women, Hastings House, Calcutta-27.
16. Jhargram Raj College, Jhargram (Midnapore).
17. Krishnagar College, Krishnagar (Nadia).
18. Lady Barabourne College, F1/2, Shuhrawardy Avenue, Calcutta-17.
19. Maharaja Bir Bikram College, Agartala (Tripura).
20. Maulana Azad College, 8, Rafi Ahmed Kidwai Rd., Calcutta-13.
21. N. R. Sirkar Medical College, 138, Lower Circular Road, Calcutta-14.
22. National Medical College, Calcutta-14.
23. Presidency College, 86/1, College Street, Calcutta-12.
24. Sanskrit College, Bankim Chatterjee Street, Calcutta-12.
25. Taki Government College, Taki (24 Parganas).
26. Tripura Engineering College, Agartala.
27. Women's College, Agartala (Tripura).

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

1. Bengal Engineering College, Botanic Gardens, Shibpore, Howrah.

2. Institute of Postgraduate Medical Education and Research, 244, Lower Circular Road, Calcutta-14.
3. Medical College, 88, College Street, Calcutta-12.
4. R.G. Kar Medical College and Hospital, Calcutta-4.

CALICUT UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Farook Training College, Feroke.
2. Little Flower College, Guruvayur.
3. Mercy College, Palghat (on temporary affiliation).
4. Nair Service Society Training College, Ottapalam.
5. Nirmalagiri College, Kuthuparamba (on temporary affiliation).
6. N.S.S. College of Engineering, Palghat.
7. Pazhassi Raja N.S.S. College, Mattanpur (on temporary affiliation).
8. Providence Women's College, Calicut.
9. Sreekrishna College, Guruvayoor (on temporary affiliation).
10. St. Joseph's College, Irinjala Kunda (on temporary affiliation).

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

Affiliated Colleges

1. Christ College, Irinjalakuda.
2. Farook College, Feroke.
3. Guruvayoorappan College, Calicut.
4. Malabar Christian College, Calicut.
5. N.S.S. Arts & Science College, Ottapalam.
6. Sree Kerala Varma College, Trichur.
7. Sree Narayana College, Cannanore.
8. St. Joseph's College, Devagiri, Calicut.
9. St. Thomas College, Trichur.
10. Vimla College, Trichur.

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. College of Engineering, Trichur.
2. Government Arts and Science College, Calicut (on temporary affiliation).
3. Government College, Kasargod.
4. Government College, Chittur, Cochin.
5. Government College, Madapally.
6. Government Training College, Calicut.
7. Government Training College, Tellicherry.
8. Government Training College, Trichur.
9. Medical College, Calicut.
10. Regional Engineering College, Calicut.

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

1. Government Brennen College, Tellicherry.

2. Government Sanskrit College, Pattambi
3. Government Victoria College, Palghat.
4. Veterinary College, Trichur.

DELHI UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

**1. Kalindi College, Dev Nagar, New Delhi.
2. Ram Lal Anand College, Dhaula Kuan, New Delhi.
3. Sri Venkateswara College, Dhaula Kuan. New Delhi.
4. Swami Shardhanand College, Alipur, Delhi.
5. Shyama Prasad Makherjee Mahila Mahavidye, New Delhi.

Constituent Colleges

1. Atma Ram S.D. College, Patel Road, Dhaula Kuan, New Delhi (on temporary affiliation up to 1969-70).
2. Bhagat Singh College, Govindpuri, Kalkaji, New Delhi.
*3. Dayal Singh College, Lodi Road, New Delhi (on temporary affiliation up to 1969-70).
*4. Deshbandhu College, Kalkaji, New Delhi.
**5. Gargi College, Lajpat Nagar IV, New Delhi.
*6. Hastinapur College, Moti Bagh.
7. Institute of Home Economics, New Delhi.
**8. Jesus & Mary College, Chanakyapuri, New Delhi.
**9. Maitreyi College, Netaji Nagar, New Delhi.
**10. Mata Sundri College, New Delhi.
**11. Modern College for Women, Defence Colony.
*12. P.G.D.A.V. College, Chitragupta Road, New Delhi.
13. Rajdhani College, Kirti Nagar, New Delhi.
*14. Shyam Lal College, G.T. Road, Shahdara, Delhi
15. Shivaji College, Karampura, New Delhi.
**16. Women's College, Timarpur, Delhi.

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

Constituent Colleges

1. Central Institute of Education, Delhi-8.
**2. Daulat Ram College, Patel Marg, Delhi.
*3. Delhi College, Delhi.
4. Hans Raj College, Delhi.
5. Hindu College.
**6. Indraprastha College for Women, Alipur Road, Delhi.
**7. Janki Devi Mahila Mahavidyalaya, Poorvi Marg, New Delhi.
8. Kirori Mal College, Delhi.
**9. Lady Irwin College, Sikandara Road, New Delhi.
**10. Lady Shri Ram College for Women, New Delhi.

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*Having evening classes up to degree standard.
**For girls only.

11. Ramjas College, Delhi.
12. S.G.T.B. Khalsa College, Dev Nagar, New Delhi.
13. Shri Ram College of Commerce, Delhi.
14. St. Stephen's College, Delhi.

University Colleges

1. Delhi School of Social Work, Delhi.
2. Institute of Post-graduate (Evening) Studies, Delhi.

**3. Miranda House, Delhi.

4. Vallabh Bhai Patel Chest Institute, Delhi.

GOVERNMENT COLLEGES

A. COLLEGE TEACHING UP TO BACHELOR'S DEGREE

1. School of Planning and Architecture, New Delhi.

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

**1. College of Nursing, Jaswant Singh Road, New Delhi.

2. Delhi College of Engineering, Kashmiri Gate, Delhi-6.

**3. Lad Hardinge Medical College, New Delhi.

4. Maulana Azad Medical College, New Delhi.

DIBRUGARH UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Chandra Kamal Bazbaruah College, Teok (on temporary affiliation).
2. Chandra Kamal Bazabaruah Commerce College, Jorhat (on temporary affiliation).
3. Dergaon Kamal Dowarah College, P.O. Dergaon (Sibsagar) (on temporary affiliation).
4. Devraj Roy College, P.O. Golaghat (Sibsagar).
5. Dibrugarh H.S. Kanoi Commerce College, Dibrugarh (on temporary affiliation).
6. Dibru College, Dibrugarh (on temporary affiliation).
7. D.C. Barua Girls' College, Jorhat (on temporary affiliation).
8. H.S.K. College, Dibrugarh.
9. Gargaon College, Simaluguri (on temporary affiliation).
10. Jorhat College, Jorhat (on temporary affiliation).
11. Jogananda Deva Satradhikar Goswami College, P.O. Bokakhat (on temporary affiliation up to T.D.C. (Part I) Standard).
12. J.B. College, Jorhat.
13. Jhanji College, P.O. Jhangi (on temporary affiliation up to T.D.C. (Part I).
14. Majuli College, P.O. Kamalbari (Sibsagar) (on temporary affiliation).
15. Manohari Devi Kanoi Girls College, Dibrugarh (on temporary affiliation).
16. Moran College, Moran (Sibsagar) (on temporary affiliation).

**For girls only.

17. Naharkatiya College, Naharkatiya, Lakhimpur (on temporary affiliation).
18. Nanda Nath Saikia College, Titabar (on temporary affiliation).
19. Madhadev College, Dikrong (North Lakhimpur) (on temporary affiliation).
20. New Jorhat College, Jorhat (no temporary affiliation).
21. North Bank College, Ghilamara (on temporary affiliation).
22. North Lakhimpur College, North Lakhimpur.
23. Sibsagar College, Sibsagar.
24. Sibsagar Girls' College, Sibsagar (on temporary affiliation).
25. Swahid Maniram Dewan College, Charing, P.O. Charing (Sibsagar) (on temporary affiliation) .
26. Tinsukia College, Tinsukia

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. Assam Agricultural College, Jorhat.
2. Assam Medical College, Dibrugarh.
3. Jorhat Engineering College, Jorhat (on temporary affiliation from 1961-62 up to B.E. Pt. I).
4. Postgraduate Training College Jorhat.

GAUHATI UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Abhayapuri College, Abhayapuri, Goalpara (provisional affiliation).
2. Anandram Dhekial Phukan College, Nowgong, Assam (on temporary affiliation).
3. Arya Vidyapeeth College, Gauhati (on temporary affiliation).
4. Bajali College, Pathsala, Kamrup (on temporary affiliation).
5. Biswanath College, Charali, Darrang (on temporary affiliation up to 1967-70).
6. B. Barooah College, Gauhati.
7. B.N. College, Dhubri.
8. Barpeta Road Howly College, P.O. Howly (Kanrup) (on temporary affiliation).
9. Barnagar College, Sorbhag (Kanrup) (on temporary affiliation).
10. Billasipara College, Billasipara (on temporary affiliation).
11. Churchandpur College, Churchandpur (Manipur) (on temporary affiliation).
12. Cachar College, Silchar (on temporary affiliation extended for 5 years, with effect from 1966-67).
13. Dakshin Kamrup College, Palasbari (on temporary affiliation up to 2nd year class).
14. Darrang College, Tezpur.
15. Gauhati Commerce College, Gauhati (on temporary affiliation extended for 5 years, w.e.f. 1966-67).
16. Goalpara College, P.O. Goalpara (Assam) (on temporary affiliation).

17. G. C. College, Silchar.
18. Gauhati College, Gauhati (on temporary affiliation).
19. Haflong College, Haflong (on temporary affiliation).
20. Handique Girls' College, Gauhati.
21. Imphal College, Imphal (on temporary affiliation).
22. Jaweharlal Nehru College, Boko (on temporary affiliation).
23. Kohima College, Kohima (on temporary affiliation).
24. Karimganj College, Karimganj.
25. Kokrajhar College, Kokrajhar (on provisional affiliation).
26. Lady Keane Girls' College, Shillong.
27. L. M. Seibyasachi Law College, Imphal (on temporary affiliation).
28. Manipur College, Manipur (on temporary affiliation).
29. Moirang College, Manipur (on temporary affiliation up to 2nd year class).
30. Mangaldoi College, P.O. Mangaldoi (Darrang) (on temporary affiliation).
31. M.C. College, Barepeta.
32. Nalbari College, Nalbari.
33. Nowgong Girls' College, Nowgong (Assam) (on temporary affiliation).
34. North Gauhati College, P.O. North Gauhati (on temporary affiliation).
35. Nowgong College, Nowgong.
36. Pandu College, Pandu (on temporary affiliation).
37. Pragajyotish College, Gauhati.
38. Pramathesh Barma College, P.O. Gauripore Distt. Goalpara (Assam) (on temporary affiliation).
39. Rabindra Sadan (Girls' College), Karimganj (on temporary affiliation).
40. Rangia College, Rangia (on temporary affiliation).
41. Shankardev College, Shillong (on temporary affiliation).
42. Shillong College, Shillong.
43. St. Anthony's College, Shillong.
44. St. Edmund's College, Shillong.
45. St. Mary's College, Shillong.
46. S.S. College, Hailakandi (provisional affiliation).
47. Sual Kuchi Budram Madhab Satradhikar College, P.O. Sual Kuchi (on temporary affiliation).
48. Synod College, Shillong (on temporary affiliation).
49. Tyagbir Hem Barua College, Jamugurihat (on temporary affiliation).
50. Tura College, Tura (on temporary affiliation).
51. Tihu College, Tihu (on temporary affiliation).
52. University Law College, P.O. Gauhati University, Jalukbari (Kamrup).

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. Assam Engineering College, Gauhati.
2. Assam Veterinary College, Gauhati.
3. Cotton College, Gauhati.
4. Dhana Manjuri College, Manipur (Imphal).
5. Dimapur College, Dimapur (on temporary affiliation).
6. Fazl Ali College, Mokokchung.
7. G.P. Women's College, Imphal (Manipur) (on temporary affiliation up to 2nd year class).
8. Kohima Science College, Kohima (on temporary affiliation).

9. Medical College, Gauhati. (on temporary affiliation up to final M.B.B.S.).
10. P.M. Government College, Aijal, Mizo Hills, Assam. (on temporary affiliation).

GORAKHPUR UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Arya Kanya Mahavidyalaya, Mirzapore (on temporary affiliation) .
2. Agrasen Mahila Mahavidyalaya, Azamgarh (on provisional affiliation).
3. Baldeo Degree College, Baragaon (Varanasi) (on provisional affiliation).
4. Buddha Degree College, Kushinagar (Deoria).
5. Buddha Vidyapeeth Degree College, Nowgarh (Basti) (on provisional affiliation).
6. B.R.D. Degree College, Deoria.
7. B.N.B. Degree College, Mariadhu Jaunpur (on temporary affiliation).
8. Binani Degree College, Mirzapore (on temporary affiliation).
9. B.N.K.B. Degree College, Akbarpur, Faizafad (on temporary affiliation).
10. D.V. Degree College, Gorakhpur (on temporary affiliation).
11. Degree College, Ghazipur.
12. Degree College, Pratapgarh.
13. D.A.V. College, Azamgarh.
14. Durgadut Chunnilal Sagarmal Khandelwal Degree College, Mau Nath Bhanjan (Azamgarh).
15. Ganpat Sahai Degree College, Sultanpur (on temporary affiliation).
16. G.S. Degree College, Samodhpur (Jaunpur).
17. Govind Vallabh Pant Degree College, Partapganj (Jaunpur) (on temporary affiliation).
18. G.D. Mahila College, Ballia (on temporary affiliation).
19. Gandhi Degree College, Maltari, Azamgarh (on temporary affiliation).
20. Hindu Degree College, Zamania (Ghazipur).
21. Hira Lal Ram Niwas Degree College, Khalilabad (Basti) (on provisional affiliation).
22. Harish Chandra Degree College, Varanasi.
23. Janta Degree College, Ranipur (Azamgarh) (on temporary affiliation).
24. Jawahar Lal Nehru Smarak Degree College, Maharajganj (Gorakhpur).
25. Kisan Degree College, Bahraich.
26. Kisan Degree College, Basti.
27. K.B. Degree College, Mirzapur.
28. K.S. Saket Mahavidyalaya, Faizabad.
29. K.B. Degree College, Dubbar (Ballia).
30. Lal Bahadur Shastri Degree College, Gonda (on provisional affiliation).
31. L.B.S. Degree College, Mughalsarai, Varanasi (on temporary affiliation).
32. M.G. Degree College, Gorakhpur (on temporary affiliation).
33. Mahila Mahavidyalaya, Basti (on temporary affiliation).
34. Madan Mohan Malviya Engineering College, Gorakhpur.
35. Madan Mohan Malviya Upadhi Mahavidyalaya, Kalakankar (Pratapgarh) (on provisional affiliation).
36. M.L.K. Degree College, Balrampur (Gonda).

37. M.M.M. Mahavidyalaya, Bhatpar Rani (Deoria) (on provisional affiliation).
38. National Degree College, Barhalganj (Gorakhpur).
39. Pratap Bahadur Degree College, Pratapgarh (on temporary affiliation).
40. Ratan Sen Degree College, Bansi, Basti (on temporary affiliation).
41. Raja Harpal Singh Degree College, Singramu (Jaunpur) (on provisional affiliation).
42. Ranvir Rananjaya Degree College, Amethi (Sultanpur).
43. R.S.K.D. Degree College, Jaunpur.
44. Sakaldiha Degree College, Varanasi (on provisional affiliation) .
45. Sant Vinoba Degree College, Deoria (on temporary affiliation).
46. Satish Chandra College, Ballia.
47. Sheopati Degree College, Shohratgarh (Basti) (on temporary affiliation).
48. Shibi National College, Azamgarh.
49. Shri Durgaji Degree College, Chandesar (Azamgarh).
50. Shri Ganesh Rai Degree College, Dobhi (Jaunpur) (on temporary affiliation).
51. Shiva Degree College, Tehri, Captainganj (Azamgarh) (on temporary affiliation).
52. St. Andrew's College, Gorakhpur.
53. Swami Devanand Degree College, Mathlar (Deoria) (on temporary affiliation).
54. Shri Murli Manohar Town Degree College, Ballia.
55. Tilakdhari College, Jaunpur.
56. Triloknath Degree College, Tanda (Faizabad).
57. Udit Narain Degree College, Padrauna.
58. Udai Pratrap College, Varanasi.

GUJARAT UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Ahmedabad Arts College, Ahmedabad (on temporary affiliation up to 14-6-1970).
2. Ahmedabad Commerce College, Ahmedabad (on temporary affiliation up to June 14, 1970).
3. Ahmedabad Science College, Ahmedabad (on temporary affiliation up to 14th June, 1971).
4. Arts College, Sankheda (Baroda) (on temporary affiliation up to 14th June, 1970).
5. Arts and Commerce College, Kaira (on temporary affiliation up to June 14, 1972).
6. A.G. Teacher's College, Ahmedabad-9.
7. Banaskantha Arts and Science College, Palanpur (on temporary affiliation up to 14-6-70).
8. Bhakta Vallabh Dhola Arts and Commerce College, Ahmedabad (on temporary affiliation up to June 14, 1970).
9. Borsad Science and Law College, Borsad (on temporary affiliation up to 1970).

10. City Arts College, Lal Darwaja, Ahmedabad (on temporary affiliation up to 14th June, 1971).
11. City Commerce College, Lal Darwaja, Ahmedabad-1 (on temporary affiliation up to 14th June, 1971).
12. City Law College, Ahmedabad-1.
13. C.U. Shah Commerce College, Ahmedabad (on temporary affiliation up to June 1970).
14. C.U. Shah Science College, Ahmedabad (on temporary affiliation up to 14-6-70).
15. Desai Chandu Lal Mani Lal Arts and Commerce College, Viramgam (on temporary affiliation up to 14-6-72).
16. Gujarat Law Society Arts College, Ahmedabad (on temporary affiliation up to June, 1972).
17. G.L.S. Arts College for Girls, Ahmedabad-1 (on temporary affiliation up to June 14, 1971).
18. Kalol Municipal Arts and Science College, Kalol (N.G.) (on temporary affiliation up to 14th June, 1974).
19. L.D. Arts College, Ahmedabad-9.
20. Motilal Nehru Law and Commerce College, Ahmedabad (on temporary affiliation up to 14th June, 1973).
21. Maniben Bhikhabhai College of Commerce and Shri Goswamy M. Nawal Lalji Arts College, Dehgam (Ahmedabad) (on temporary affiliation up to 1-6-70).
22. M.S. Bhagat and C.S. Sonawala Law College, Nadiad.
23. Navgujarat Arts College, Ahmedabad (on temporary affiliation up to 14-6-1973).
24. Nagujarat Law and Commerce College, Ahmedabad (on temporary affiliation up to June 14, 1974).
25. Patel J.B. Rudewala Arts College and Patel A.M. Rudewala Commerce College, Borsad (on temporary affiliation up to 14-8-70).
26. Prakash College of Education, Ahmedabad.
27. Prabhudas Thakkar Arts and Science College, Ahmedabad. (on temporary affiliation up to 14-6-72).
28. Shri B.P. Brahmbhat Arts and M.H. Guru Commerce College, Unjha (on temporary affiliation up to 14-6-72).
29. Sardar Vallabhbhai Arts College, Ahmedabad.
30. Saraspur Arts and Commerce College, Ahmedabad (on temporary affiliation for Arts up to 1973 and for Commerce up to 1969).
31. Secondary Teachers' Training College, Ahmedabad (on temporary affiliation up to 14th June, 1974).
32. Sheth Ranchodlal Acharat Lal College of Arts and Commerce, Ahmedabad-1 (on temporary affiliation up to 1970).
33. Sarda Vallabhbhai Commerce College, Ahmedabad.
34. Sheth Ranchodlal Acharat Lal College of Science, Ahmedabad-1 (on temporary affiliation up to 14th June, 1970).
35. Shree Natwarsinghji Arts and Science College, Chhota Udepur (Baroda) (on temporary affiliation up to June, 1971).
36. Smt. R.D. Shah Arts College and Smt. V.D. Shah Commerce College, Dholka (on temporary affiliation up to 14-6-73).
37. Sheth L.H. Science College, Mansa (on temporary affiliation up to 14-6-70).

38. Sheth S.D. Arts and Shah B.R. Commerce College, Mansa (on temporary affiliation up to 14-6-70).
39. Secondary Teachers Training College, Visnagar (on temporary affiliation up to 14-6-70).
40. Shah Khimchand Bhai Muljibhai Law College, Tithal Road, P.O. Bulsar (Gujarat) (on temporary affiliation).
41. Shree S.S. Mehta Arts and Sree M.M. Patel Commerce College Himatnagar (on temporary affiliation up to 14th June 1970).
42. Smt. H.C. Patel (Kandari) Arts and Commerce College, Miyagam, Karjan (on temporary affiliation up to 1971).
43. Shri B.D. Shah College of Education, Modasa (on temporary affiliation up to 14-6-71).
44. Sheth Shoorji Vallabhdas Arts and Commerce College, Mandvi, Kutch (on temporary affiliation up to June 14, 1970).
45. Shree Lunawada Arts and Science College, Lunawada, district Panchmahals (on temporary affiliation up to June 14, 1970).
46. Science College, Kadi (N.G.) (Mahsana) (on temporary affiliation up to 14th June, 1970).
47. Shri Swaminarayan Science College, Ahmedabad-17 (on temporary affiliation up to 14th June, 1973).
48. Shri Swaminarayan Arts College, Ahmedabad (on temporary affiliation up to 14th June, 1971).
49. Shri Sahajanand Arts and Commerce College, Ahmedabad-6 (on temporary affiliation up to 14-6-74).
50. Secondary Teachers Training College, Kaira (on temporary affiliation up to 14-6-71).
51. The St. Xavier's College, Ahmedabad.
52. Tolani College of Arts and Science, Gandhidham, Adipur (on temporary affiliation up to June 14, 1970).
53. T.C. Kapadia Arts College, Bodeli (on temporary affiliation up to June 14, 1970).
54. Uni-Trust-Surajba Mahila Arts College, Nadiad (on temporary affiliation up to 14-6-72).
55. Vivekanand College of Education, Ahmedabad (on temporary affiliation up to 31-5-70).
56. Vivekanand College of Commerce and Law, Ahmedabad (on temporary affiliation up to 14-6-71).
57. Vivekanand College of Commerce, Ahmedabad (on temporary affiliation up to 14-6-71).
58. Vivekanand College of Arts, Ahmedabad (on temporary affiliation up to 14-6-70).
59. Vivekanand College of Education and Law, Mehsana (on temporary affiliation up to 14-6-70).
60. Yuvraj Subhag Simhji Arts and Shri Kantilal Supurdas Commerce College, Devgad Baria (Panchmahal) (on temporary affiliation up to June 14, 1970).

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

Affiliated Colleges

1. Arts and Science College, Dabhoi (on temporary affiliation up to 14th June, 1970).

2. Arts and Science College, Bhadran (on temporary affiliation up to June 14, 1970).
3. B.D. College, Ahmedabad.
4. Bhavan's College Dakor (on temporary affiliation up to June 14, 1973).
5. C.B. Patel Arts Institute, Nadiad.
6. C.N. Arts and B.D. Commerce College, Kadi (on temporary affiliation up to June 14, 1974).
7. College of Education, Patan (on temporary affiliation up to 14-6-70).
8. J. & J. College of Science, Nadiad.
9. M.G. Science Institute, Ahmedabad-9.
10. Municipal Arts and Commerce College, Mahsana (on temporary affiliation up to June 14, 1973).
11. New Law College, Ahmedabad (on temporary affiliation up to 14-6-72).
12. Navgujarat Commerce College, Ahmedabad (on temporary affiliation up to 14th June, 1973).
13. Navjivan Arts and Commerce College, Dohad (on temporary affiliation up to 14-6-71).
14. Parekh Brothers Science College, Kapadwanj (on temporary affiliation up to 14-6-71).
15. Shri Kishandas Kikani Arts and Commerce College, Dhandhuka (on temporary affiliation up to 14-6-71).
16. Shah Keshavlal Somabhai Arts College & V.M. Parekh Commerce College, Kapadwanj (on temporary affiliation up to 14-6-71).
17. Shri R. K. Arts and Science College, Petlad.
18. Smt. B.C.J. College of Education, Cambay (on temporary affiliation up to 31-5-71).
19. Sheth Bhola Bhai Jeshinghai Institute of Learning and Research Ashram Road, Ahmedabad.
20. Sheth H. A. College of Commerce, Ahmedabad.
21. Sheth K.M. School of Postgraduate Medicine and Research, Ahmedabad-6.
22. Sheth Purshotamdas Thakurdas Arts and Science College, Godhra (on temporary affiliation up to June 14, 1973).
23. Sheth H.P. Arts and Smt. S.M. Panchal Science College, Talod (on temporary affiliation up to 14th June 1970).
24. Shri H.K. Arts College, Ahmedabad.
25. Saifee Jubilee Arts and Commerce College, Sidhpur (on temporary affiliation up to June 14, 1971).
26. Shri S.K. Shah and Shri Krishna O.M. Arts College and Shri Hiralal Shivalal Shah College of Commerce, Modasa (on temporary affiliation up to June 14, 1970).
27. Sir P. T. Science College, Modasa (on temporary affiliation up to June 14, 1971).
28. Sheth M.N. Science and Shri & Smt. P. K. Kotawala Arts College, Patan.
29. Shri Rajni Parekh Arts and K. B. Commerce College, Cambay (on temporary affiliation up to June 14, 1973).
30. Shri I.V. Patel College of Commerce, Nadiad.
31. Smt. N.H.L. Muicipal Medical College, Ahmedabad (on temporary affiliation up to 14th June, 1972).
32. Shri U.P. Arts College and Smt. M.G. Panchal Science College, Pilvai (N.G.) (on temporary affiliation up to 14th June, 1970).

33. Sir L.A. Shah Law College, Ahmedabad.
34. Smt. Bhikhuben Chandulal Julundwala Science College, Cambay (on temporary affiliation up to June 14, 1971).
35. The H.L. College of Commerce, Ahmedabad.
36. The L.M. College of Pharmacy, Ahmedabad.

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

1. B.J. Medical College, Ahmedabad-16.
2. Gujarat College, Ahmedabad-6.
3. L.D. College of Engineering, Ahmedabad-9.
4. M.N. College, Visnagar (N.G.).
5. R.R. Lalan College, Bhuj.
6. Government Dental College and Hospital, Ahmedabad.

INDORE UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. Devi Ahilya Girls' Degree College, Indore (on temporary affiliation).
2. Islamia Karimia Degree College, Indore.
3. Kasturbagram Rural Institute, Kasturbagram (on temporary affiliation).
4. Rajkumarsingh Ayurvedic College, Indore (on temporary affiliation).
5. Shri Vaishnav Arts and Commerce College, Indore (on temporary affiliation).

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

1. Indore Christian College, Indore.
2. Indore School of Social Work, Indore (on temporary affiliation).
3. P.M.B. Gujarati College, Indore.
4. Govindram Seksaria Institute of Technology & Science, Indore.

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. College of Dentistry, Indore.
2. College of Nursing, Indore.
3. Govt. Sanskrit Degree College, Indore.
4. Govt. New Girls' Degree College, Indore.

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

1. Govt. Girls' College, Indore.
2. Govt. Arts and Commerce College, Indore.
3. Govt. Degree College, Mhow.
4. Holkar Science College, Indore.
5. Mahatma Gandhi Memorial Medical College, Indore.

JABALPUR UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges
*1. Hirarini Law College, Jabalpur (on temporary affiliation).
2. Katni Mahila Mahavidyalaya, Katni (on temporary affiliation).
*3. Kesarwani Mahavidyalaya, Jabalpur (on temporary affiliation).
4. Kamta Presad Guru Bhasha Bharati, Jabalpur.
5. Mahakoshal Ayurvedic Mahavidyalaya, Jabalpur.
6. Navyug Arts and Commerce College, Jabalpur (on temporary affiliation).
*7. N.E.S. Arts College, Jabalpur (on temporary affiliation).
*8. New Education Society Law College, Jabalpur (on temporary affiliation).
*9. Shri Tilak Rashtriya Mahavidyalaya, Katni (on temporary affiliation).
10. St. Aloysius College, Jabalpur (on temporary affiliation).

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

Affiliated Colleges
*1. C.P. Mahila Mahavidyalaya, Jabalpur (on temporary affiliation) .
*2. D.N. Jain Mahavidyalaya, Jabalpur (on temporary affiliation).
3. G.S. College of Commerce and Economics, Jabalpur (on temporary affiliation for 5 years from 1968-69).
4. Hawabagh Women's College, Jabalpur.
*5. Hitkarini Mahavidyalaya, Jabalpur (on temporary affiliation).
*6. Shyam Sunder Agarwal College, Sihora (on temporary affiliation).

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

1. College of Educational Psychology and Guidance, Jabalpur (on temporary affiliation).
2. Government Engineering College, Jabalpur.
3. Government Medical College, Jabalpur.
4. Government Science College, Jabalpur.
5. Institute of Languages and Research, Jabalpur (on temporary affiliation).
6. Mahakoshal Arts Mahavidyalaya, Jabalpur.
7. M.H. College of Home Science for Women, Jabalpur (on temporary affiliation) .
8. Prantiya Shikshan Mahavidyalaya, Jabalpur.

JADAVPUR UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGE TEACHING UP TO BACHELOR'S DEGREE

Affiliated College
1. Smt. Jawahari Devi Birla Institute of Home Science, Calcutta.

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*Question of granting further affiliation is under consideration.

JAMMU UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGE TEACHING UP TO BACHELOR'S DEGREE

Affiliated College

1. S.P.M. Rajput College of Commerce, Jammu.

GOVERNMENT COLLEGES

B. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. Government Agriculture College, R.S. Pora (Jammu) (on temporary affiliation).
2. Government Ayurvedic College, Jammu (on temporary affiliation).
3. Government College, Bhadrwah (on temporary affiliation) .
4. Government College, Kathua (on temporary affiliation).
5. Government College, Poonch (on temporary affiliation).
6. Government College, Udhampur (on temporary affiliation).
7. Government College for Women, Jammu.
8. Government College for Women, Gandhinagar (Jammu) (on temporary affiliation).
9. Government Gandhi Memorial Science College, Jammu.
10. Maulana Azad Memorial College, Jammu.
11. Teachers' Training College, Jammu.

JAWAHARLAL NEHRU KRISHI VISHWAVIDYALAYA
NON-GOVERNMENT COLLEGES

A. COLLEGE TEACHING UP TO BACHELOR'S DEGREE

Constituent College

1. College of Agricultural Engineering, Jabalpur.

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

1. Agriculture College, Raipur.
2. Agriculture College, Gwalior.
3. Agriculture College, Indore.
4. Agriculture College, Jabalpur.
5. Agriculture College, Sehore.
6. Agriculture College, Rewa.
7. Veterinary College, Jabalpur.
8. Veterinary College, Mhow.

JIWAJI UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Arts Degree College, Sumaoli, Distt. Morena (on temporary affiliation).
2. Chhatarsal Degree College, Pichhore (Shivpuri) (on temporary affiliation).

3. Jain Degree College, Bhind (on temporary affiliation).
4. Janta Degree College, Dabra (on temporary affiliation).
5. Maharaja Mansing Mahavidyalaya, Gwalior-3 (on temporary affiliation).
6. Madhav Mahavidyalaya, Chanderi (on temporary affiliation).
7. Nehru Degree College, Ashoknagar (Guna) (on temporary affiliation).
8. Parshuram Degree College, Birkhedi (Bhind) (on temporary affiliation).
9. Shrimant Vijyaraje Scindia Degree College, Adhokar (Bhind) (on temporary affiliation).
10. Shri Gandhi Mahavidyalaya, Balaji Mihona (Bhind) (on provisional affiliation).
11. Vijay Raje Scindia Mahavidyalaya, Bhander (Gwalior) (on temporary affiliation).

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

1. Degree College, Ambah (Morena).
2. G.P. Postgraduate College, Morena (on temporary affiliation).
3. Madhav Engineering College, Gwalior (on temporary affiliation).
4. Madhav Mahavidyalaya, Gwalior (on temporary affiliation).
5. P.G. Vigyan Mahavidyalaya, Lashkar (Gwalior) (on temporary affiliation).
6. Dr. Whagwat Sahai Smarak Mahavidyalaya, Gwailor (on temporary affiliation).

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. Government Ayurvedic College, Gwalior.
2. Government Degree College, Sheopur Kalan (M.P.) (on temporary affiliation).

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

1. Government College, Datia.
2. Government College, Guna.
3. Government College, Shivpuri.
4. Government Science College, Gwalior.
5. G.R. Medical College, Gwalior.
6. Government College of Education, Gwalior.
7. Kamla Raja Girls' Degree College, Gwalior.
8. Laxmibai College of Physical Education, Gwalior.
9. M.L.B. Arts & Commerce College, Gwalior.
10. Maharaja Jiwaji Rao Scindia Mahavidyalaya, Bhind.
11. Government Girls Degree College, Morar (on temporary affiliation).

JODHPUR UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Shri Mahesh Teachers' College, Jodhpur (on temporary affiliation).
2. Lachoo Memorial College of Science, Jodhpur (on temporary affiliation).

KANPUR UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Arya Kanya Mahavidyalaya, Jhansi (on temporary affiliation).
2. A.S. Degree College, Fatehpur.
3. Baiswara Degree College, Lalganj (Rai Bareli).
4. Bhagwan Din Arya Kanya Pathshala Degree College, Lakhimpur Kheri (on temporary affiliation).
5. Bipin Behari College, Jhansi.
6. Brahmanand Degree College, Kanpur.
7. B.N.V. Degree College, Rath (Hamirpur).
8. Cane Societies Nehru Degree College, Hardoi.
9. Dayanand College of Law, Kanpur.
10. Guru Nanak Girls' Degree College, Sundarnagar, Kanpur.
11. Halim Muslim Degree College, Kanpur.
12. Hindu Kanya Mahavidyalaya, Sitapur.
13. Janta Agriculture College, Ajitmal (Etawah).
14. Janta College, Bakewar (Etawah).
15. Jawahar Lal Nehru Memorial Degree College, Barabanki.
16. K.K. College, Etawah.
17. Nehru College Chibramau, Farrukhabad (on temporary affiliation).
18. Narain Arya Kanya Pathshala Degree College, Farrukhabad.
19. S.N. Sen Balika Vidyalaya Degree College, Kanpur.
20. S.N. Shukla Girls' Degree College, Unnao (on temporary affiliation).
21. Vallabhram Saligram Mehta College of Science, Bharwari, Allalhabad (on temporary affiliation).

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

1. Acharya Narendra Deo Mahapalika Mahila College, Kanpur.
2. Attara Degree College, Attara (Banda).
3. Badri Vishal Degree College, Farrukhabad.
4. Bundelkhand College, Jhansi.
5. Christ Church College, Kanpur.
6. Dayanand Girls' College, Kanpur.
7. Dayanand Subhash National College, Unnao.
8. Dayanand Vedic College, Orai.
9. Dayanand Women's Training College, Kanpur.
10. D.A.V. College, Kanpur.
11. D.B.S. College, Kanpur.
12. D.N. Degree College, Fategarh.
13. Feroze Gandhi College, Rae Bareli.
14. Jawala Devi Vidyamandir Degree College, Kanpur.
15. Juhri Devi Girls Degree College, Kanpur.
16. Kulbhaskar Ashram Degree College, Allahabad.
17. Pt. Prithvi Nath Degree College, Kanpur.
18. Pt. Jawahar Lal Nehru Degree College, Banda.
19. R.M.P. Degree College, Sitapur.
20. V.S.S.D. College, Kanpur.
21. Yuvraj Dutta College, Lahimpur Kheri.

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. Government Central Textile Institute, Kanpur.
2. N.H. Medical College, Lucknow.

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

1. Government Agricultural College, Kanpur.
2. Harcourt Butler Technological Institute, Kanpur.
3. G.S.V.M. Medical College, Kanpur.

KARNATAK UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. A.G.E.'s Shri K.G.S. Arts & Science College, Karwar (on temporary affiliation up to June, 1970).
2. Anjuman '-e-' Islam's Nehru Arts & Science College, Hubli (on temporary affiliation up to June, 1970).
3. Adarsha Shikshan Samitis Commerce College, Gadag (on temporary affiliation up to June, 1970).
4. Anjuman Hami-e-Muslimens Arts and Sciences College, Bhatkal (on temporary affiliation).
5. Aurved Vidyalaya Samitis Aurved College, Bijapur (on temporary affiliation).
6. Basaveshwar Science College, Bagalkot.
7. B.L.D.E. Association New Arts College, Bijapur (on temporary affiliation).
8. Basaveshwar Arts College, Bagalkot (on temporary affiliation up to June, 1971).
9. Basaveshwar Engineering College, Bagalkot (on temporary affiliation up to June, 1970).
10. B.L.D.E. Association's Arts and Science College, Jamkhandi (on temporary affiliation up to June, 1970).
11. B.V.B. College of Arts & Science, Bidar (on temporary affiliation up to June, 1971).
12. B.V.B. College of Engineering & Technology, Hubli (on temporary affiliation up to June, 1970).
13. B.R.B. College of Commerce, Raichur (on temporary affiliation up to June, 1970).
14. Dr. A. V. Baliga College of Commerce, Kumta (on temporary affiliation up to June, 1971).
15. Dr. A. V. Baliga College of Arts & Science, Kumta (on temporary affiliation up to June, 1970).
16. Engineering College, Gulbarga (on temporary affiliation up to June, 1970).
17. G.I. Bagewadi Arts and Science College, Nipani (on temporary affiliation up to June, 1970).

18. Gokhale Centenary College, Ankola (on temporary affiliation up to June, 1970).
19. Govindram Seksaria Science College, Belgaum (on temporary affiliation up to June, 1971).
20. Gudleppa Hallikeri College, Haveri (on temporary affiliation up to June, 1970).
21. Home Science College, Hubli (on temporary affiliation up to 1970).
22. H.K.E. Society's Arts and Science College, Shorapur (Gulbarga) (on temporary affiliation).
23. H.K.E. Society's Muluk Sheriar Irani Institute of Science, Gulbarga (on temporary affiliation).
24. H.K.S. Arts and Science College, Shahabad (on temporary affiliation).
25. J.G. College of Commerce, Hubli.
26. J.N. Medical College, Belgaum (on temporary affiliation up to June, 1970).
27. J.S.S. Law College, Hubli (on temporary affiliation up to June, 1970).
28. J.S.S.'s Banashankari Arts College, Dharwar.
29. J.S.S's Shantikumar Gubbi Science College, Dharwar (on temporary affiliation up to June, 1970).
30. J.S.S. Arts and Science College, Gokak (on temporary affiliation up to June, 1971).
31. J.T. College, Gadag (on temporary affiliation up to June, 1970).
32. Kotturswamy College of Education, Bellary.
33. K.C. Patil's Science College, Bijapur (on temporary affiliation).
34. K.L. Society's Gogate College of Commerce, Belgaum (on temporary affiliation up to June 1971).
35. K.L.E. Society's Basaveshwar Kore Arts and Science College, Chikodi (on temporary affiliation).
36. Kottureshwar College, Kottur (on temporary affiliation up to June, 1972).
37. Kittel Science College, Dharwar (on temporary affilation up to June, 1970).
38. K.R.C.E.S's Arts and Science College, Bailhunga (on temporary affiliation up to June 1970).
39. Karnatak Ayurved Vidapeeth Societys' Ayurved College, Belgaun (on temporary affiliation).
40. L.V.D. College, Raichur (on temporary affiliation up to June, 1970).
41. Medical College, Gulbarga (on temporary affiliation up to June 1970).
42. Municipal Arts College, Laxmeshwar (on temporary affiliation up to June, 1970).
43. Municipal Arts College, Nargund (on temporary affiliation up to June, 1970).
44. M.P.E. Society's Arts and Science College, Honavar (on temporary affiliation up to June, 1970).
45. M.V. Peetha's Rural Arts College, Haunsbhavi (on temporary affiliation up to June, 1970).
46. Motoshri G.V. Chiniwar Arts College, Muddebihal (on temporary affiliation up to June, 1972).
47. P.C. Jabin Science Sollege, Hubli.
48. Raja Lakshmagouda Law College, Belgaum.
49. Raja Lakshmagouda Science Institute, Belgaum.

50. Rani Parvati Devi College, Belgaum (on temporary affiliation up to June, 1970).
51. R.T.E.S.'s Arts and College, Ranebennur (on temporary affiliation up to June, 1971).
52. Shri Channabasaveshwar Arts College, Bhalki (on temporary affiliation up to June 1970).
53. Shri Shivayog's Murugharajendra Arts College, Athani (on temporary affiliation up to June 1970).
54. Sanganabasaveshwar Arts College, Bijapur (on temporary affiliation up to June, 1973).
55. Shri A.S. Patil's College of Commerce, Bijapur.
56. Shri Gavisidheshwar V.V. Trust College, Koppal, (on temporary affiliation up to June, 1971).
57. Sri Kadasiddheshwar Arts College and H.S. Kotambri Science Institute, Hubli (on temporary affiliation up to June, 1970).
58. Shri V.M. Society's Arts and Science College, Ilkal (on temporary affiliation up to June, 1971).
59. Shri Annadaneshwar Arts and Science College, Naregal (on temporary affiliation up to June, 1973).
60. S.B. College of Arts, Gulbarga (on temporary affiliation up to June, 1971).
61. S.S. Society's Commerce College, Shahdol (on temporary affiliation up to June 1971).
62. S.B. College of Science, Gulbarga (on temporary affiliation up to June, 1971).
63. S.J.M.V. Women's College, Hubli (on temporary affiliation up to June, 1970).
64. S.B. Commerce College, Gulbarga (on temporary affiliation up to June, 1972).
65. S.D.E. Society's Arts and Science College, Sankeshwar (on temporary affiliation up to June, 1971).
66. S.S.L. Law College, Gulbarga.
67. S.S. Khuba's Baraveshwar College of Arts and Science, Basavakalyan (on temporary affiliation up to June, 1970).
68. Smt. Veeramma Gangasiri Women's College, Gulbarga (on temporary affiliation up to June, 1971).
69. S.S.P. Samitis Arts College, Siddapur (on temporary affiliation).
70. Shri Sadguru Shivanand College, Kagvad (on temporary affiliation up to June, 1971).
71. T.A.V.P.'s Aurved College, Bellary (on temporary affiliation).
72. T.M.E.C.'s Arts and Science College, Gulegud (on temporary affiliation).
73. V.V. Sanghas Smt. Allum Sumanlamma Memorial Arts and Science College for Women, Bellary (on temporary affiliation).
74. V.P.S.'s C.S. Bembalgi Arts and Science College, Ramadurg (on temporary affiliation up to June, 1971).
75. Veerashaiva College, Bellary.
76. Vijayanagar College, Hospet (on temporary affiliation up to June, 1971).
77. V.M. College, Hungund (on temporary affiliation up to June, 1971).

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

Affiliated College

1. Lingaraj College, Belgaum.

Constituent Colleges

1. University College of Education, Dharwar.
2. University Law College, Dharwar.
3. Karnatak Arts College, Dharwar.
4. Karnatak Science College, Dharwar.

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. Government College, Gulbarga (on temporary affiliation up to 1970).
2. Government Medical College, Bellary (on temporary affiliation up to June, 1970).
3. Government College of Education, Gulbarga (on temporary affiliation up to June, 1971).
4. Government College of Education, Jamkhandi (on temporary affiliation up to June, 1970).
5. Government College of Education, Belgaum.

B. COLLEGE TEACHING UP TO POSTGRADUATE DEGREE

1. Karnatak Medical College, Hubli.

KASHMIR UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Gandhi Memorial College, Srinagar.
2. Islamia College of Science and Commerce, Srinagar (on temporary affiliation).
3. Vishwa Bharti Women College, Rainawari (Srinagar) (on temporary affiliation).

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. Amar Singh College, Srinagar.
2. Government Agriculture College, Sopore (on temporary affiliation).
3. Government College, Anantnag.
4. Government College, Baramulla.
5. Government College, Sopore (on temporary affiliation).
6. Government College for Women, Navakadal (Srinagar).
7. Government College for Women, Srinagar.
8. Government Medical College, Srinagar.
9. Government Unani College, Srinagar.
10. Regional Engineering College, Srinagar (on temporary affiliation).
11. Sri Pratap College, Srinagar.
12. Teachers Training College, Srinagar.

KERALA UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. All Saints College, Trivandrum (on temporary affiliation).
2. Assumption College, Changanacherry.
3. Alphonsa College, Palai (on temporary affiliation).
4. Bishop Chulaparambil Memorial College, Kottayam.
5. Baselius College, Kottayam (on temporary affiliation).
6. Bishopmoore College, Mavelikara (on temporary affiliation).
7. Christian College, Chengannur (on temporary affiliation).
8. Deva Matha College, Kuavilangad P.O. (on temporary affiliation).
9. Devaswom Board College, Sasthamcottach (on temporary affiliation).
10. Her Highness Sethu Parvathi Bai N.S.S. College for Women, Trivandrum.
11. Karmala Rani Training College, Quilon.
12. Kuriakose Elias College, Mannanam (on temporary affiliation).
13. Mar Athanasius College of Engineering, Kothamangalam.
14. Mar Theophilus Training College, Trivandrum.
15. Miladr-e-Sherief Memorial College, Kayamkulur (on temporary affiliation).
16. Mount Carmel Training College, Kottayam.
17. Mount Tabor Training College, Pathanapuram.
18. New Man College, Thodupuzha (on temporary affiliation).
19. N.S.S. College, Kochuramapuram, Shertallai (on temporary affilication).
20. N.S.S. Training College, Changanacherry.
21. N.S.S. Training College, Pandalam.
22. Peet Memorial Training College, Mavelikkara.
23. Sree Narayana College, Chempazhanthi (on temporary affiliation).
24. Sree Narayana Training College, Nedumganda.
25. Sree Narayana College, Sivagiri, Varkala (on temporary affiliation).
26. Shree Narayana Mangalam Training College, Moothakunnam.
27. St. Joseph's College for Women, Alleppy.
28. St. Joseph's Training College, Mannanam.
29. St. John's College, Anchal (on temporary affiliation).
30. St. Joseph's Training College for Women, Ernakulam.
31. St. Peters College, Kolencherry (on temporary affiliation).
32. St. Stephen's College, Uzhavoor P.O. (on temporary affiliation).
33. St. Thomas College, Pazhavangadi, P.O. Ranni (on temporary affiliation).
34. St. Thomas Training College, Palai.
35. St. Xavier's College for Women, Alwayes (on temporary affiliation).
36. Thangal Kunja Musaliyar College of Engineering, Karikode, Quilon.
37. Titus II Teachers' College, Tiruvalla.
38. Velu Thampi Memorial NSS College, Dhanuvachapuram (on temporary affiliation).

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

Affiliated Colleges

1. Catholicate College, Pathanamthitta.
2. C.M.S. College, Kottaryam.
3. Fatima Mata National College, Quilon.
4. Loyala College of Social Sciences, Chiruvikkal, Trivandrum.
5. Mahatma Gandhi College, Trivandrum.
6. Mar Athanasius College, Kothamangalam.
7. Mar Ivanios College, Trivandrum.
8. Mar Thomas College, Thiruvalla.
9. Nirmala College, Muvattupuzha.
10. N.S.S. College, Pandalam.
11. N.S.S. Hindu College, Changanacherry.
12. Sacred Heart College, Thevara, Ernakulam.
13. Sanatana Dharma College, Alleppey.
14. Sree Narayana College, Quilon.
15. Sree Narayana College for Women, Quilon.
16. Sree Sankara College, Kalady.
17. St. Albert's College, Ernakulam.
18. St. Berchman's College, Changanacherry.
19. St. Teresa's Colloge, Ernakulam.
20. St. Thomas College, Kozhencherry.
21. St. Thomas College, Palai.
22. Union Christian College, Alwaye.

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. Ayurveda College, Trivandrum.
2. College for Women, Trivandrum.
3. Government Training College, Trivandrum.
4. Medical College, Kottayam (on temporary affiliation).
5. Thirumala Devaswom Medical College, Alleppey (on temporary affiliation).

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

1. Agricultural College, Vellayani.
2. College of Engineering, Trivandrum.
3. Law College, Ernakulam.
4. Law College, Trivandrum.
5. Maharaja's College, Ernakulam.
6. Medical College, Trivandrum.
7. Sanskrit College, Trivandrum.
8. University College, Trivandrum.
9. Government Sanskrit College, Tripunithura.

KURUSHETRA UNIVERSITY

NON-GOVERNMENT COLLEGES

A. COLLEGE TEACHING UP TO BACHELOR'S DEGREE

Affiliated College

1. College of Agriculture, Kaul (Karnal).

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. Government College of Education, Kurushetra.
2. Government College; Kurushetra.
3. Regional Engineering College, Kurushetra.

LUCKNOW UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Associated Colleges

1. Bappa Sri Narain Vocational Degree College, Lucknow.
2. D.A.V. Degree College, Lucknow.
3. Isabella Thouburn College, Lucknow.
4. Jubilee Girls' College, Char Bagh, Lucknow.
5. Karamat Hussain Muslim Girls' College, Faizabad Road, Lucknow.
6. Khunkhunji Girls' College, Lucknow.
7. Loreto Convent Degree College, Lucknow.
8. Lucknow Christian College, Lucknow.
9. Mahila Vidyalaya College, Lucknow.
10. Nari Shiksha Niketan, Lucknow.
11. Navayuga Kanya Vidyalaya, Lucknow.
12. Shashibhushan Balika Vidyalaya, Lucknow.
13. Shia College, Lucknow.
14. Shri Jai Narain Degree College, Lucknow.
15. Vidyant Hindu Degree College, Lucknow.

B. COLLEGE TEACHING UP TO POSTGRADUATE DEGREE

University College

1. King George's Medical College, Lucknow.

GOVERNMENT COLLEGE

A. COLLEGE TEACHING UP TO BACHELOR'S DEGREE

1. State Ayurvedic College, Lucknow.

MADRAS UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Auxilium College, Katpadi Extension (N.A.Dt.).
2. A.V.C. College, Mayuram (Tanjore Distt).
3. Bishop Heber College, Tirucmirapalli (on temporary affiliation).
4. Chikkiah Naicker College, Erode.
5. C. Abdul Hakeem College, Melvisharam (N.A.Dt.).
6. C. Kanadaswami Naidu College for Women, Cuddalore.
7. Emeralld Heights College for Women, Ootacommand (on temporary affiliation).

8. Gobi Arts College, Gobichettipadayam (on temporary affiliation).
9. Islamiah College, Vaniyambadi (N.A.Dt.).
10. Kandaswami Kandar College, Velur (Salem) (on temporary affiliation).
11. Khadir Mohlodeen College, Adirampattinam (Thanjavur Distt).
12. Nallumuthu Gounder Mahalingam College, Pollachi.
13. Nirmala College for Women, Coimbatore.
14. Nehru Memorial College, Putanampatti (Trichy Dt.) (on temporary affiliation).
15. Pachaiyappa's College for Women, Kancheepuram.
16. Poompuhar College of Indian Culture, Mylayur (Tanjore).
17. Providence College for Women, Coonoor (Nilgiris) (on temporary affiliation).
18. Sacred Heart College, Tirupattur (N.A. Dt.).
19. Sri Ramkrishna Mission Vidyalaya Arts College, Perianaic Kenpalayam (on temporary affiliation).
20. Sri G.V.G. Visalakshi College for Women, Udamalpet.
21. Sri Sarda College for Women, Salem (on temporary affiliation).
22. Voorhees College, Vellore (N.A.Dt.).
23. Dwarka Doss Goverdhan Doss Vaishnav College, Madras-29.
24. Sir Theagaraya College, Madras-21.
25. Sri Avinashilingam Training College for Women, Coimbatore (on temporary affiliation).
26. Sri Sarada Training College for Women, Salem.
27. Shrimati D.N. Bhatt Vaishnav College for Women, Chronepet, Madras (on temporary affiliation).
28. Sri Vasavi College, Erode (on temporary affiliation).

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

Affiliated Colleges

1. Agurchand Manmul Jain College, Madras-61.
2. Avinashilingam Home Science College for Women, Coimbatore-11.
3. Ethiraj College for Women, Madras-8.
4. Holy Cross College, Tiruchirapalli.
5. Jamal Mohammad College, Tiruchirapalli.
6. Loyola College, Madras-34.
7. Madras Christian College, Tambaram.
8. National College, Tiruchirapalli.
9. Pachaiyappa's College, Madras-31.
10. P.S.G. Arts College, Coimbatore-14.
11. P.S.G.R. Krishnammal College for Women, Coimbatore.
12. Sri Pushpam College, Poondi (P.O.) (Thanjavur).
13. Sitalakshmi Ramaswami College, Tiruchirapalli.
14. South Indian Educational Trust Women's College, Madras-18.
15. Stella Mar's College, Madras-6.
16. St. Joseph's College, Tiruchirapalli.
17. The New College, Madras-14.
18. Vivekananda College, Madras-4.
19. Women's Christian College, Madras-6.
20. Y.M.C.A. College of Physical Education, Madras.

Professional Colleges

Medicine

1. Christian Medical College, Vellore (N.A.Dt.).

Engineering

1. Coimbatore Institute of Technology, Coimbatore.
2. P.S.G. College of Technology, Coimbatore-14.

Teaching

1. Meston Training College, Madras-14.
2. National Training College for Women, Madras-5 (on temporary affiliation).
3. Sri Ramakrishnan Mission Vidyalaya Training College, Perianaickenpalayam (Coimbatore).
4. St. Christopher's Training College, Madras-7.
5. Stella Matutina College of Education, Madras.

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. Arignar Anna Government Arts College (Women) Wallajapet (N.A.Dt.) (on temporary affiliation).
2. Arignar Anna Government Arts College (Men) Nammakkal (Salem) (on temporary affiliation).
3. Bharathidasan Government Arts College (Women) Pondichary (on temporary affiliation).
4. Chikkanna Government Arts College, Tiruppur (on temporary affiliation).
5. Government Arts College (Women) Thanjavur (on temporary affiliation).
6. Government Arts College, Thiruvannamalai (on temporary affiliation).
7. Government Arts College, Vridhachalam (on temporary affiliation).
8. Government Arts College, Cheyyar (N.A.Dt.) (on temporary affiliation).
9. Government Arts College, Ariyalur.
10. Government Arts College, Cuddalore (on provisional affiliation).
11. Government Arts College, Dharmapuri (on provisional affiliation).
12. Government Arts College, Mount Road, Madras-2.
13. Government Arts College for Women, North Madras (on provisional affiliation).
14. Government Arts College, Krishnagirl, Salem.
15. Government Arts College, Ootacamund.
16. Government Arts College, Karur, Trichirapalli Distt. (on provisional affiliation).
17. Government College of Technology, R,S, Puram, Coimbatore-13.
18. Government College for Women, Kumbakonam (on temporary affiliation).
19. Government Thirumagal Mill's College, Gudiyatham (on provisional affiliation).
20. Kilpauk Medical College, Kilpauk, Madras-10.
21. Loganatha Narayanasamy Government Arts College, Ponneri (on temporary affiliation).

22. Modern College, Karaikkal (on temporary affiliation).
23. Muthurangam Government Arts College, Vellore (on provisional affiliation).
24. Raja's College, Pudukottai.
25. Raja Serfoji Government College, Thanjavur.
26. Regional College of Engineering (Tiruchirapalli (on provisional affiliation).
27. Teachers' College, Saidapet, Madras-15.
28. Thanjavur Medical College, Thanjavur (on provisional affiliation).
29. Thiruvalluvar Government Arts College, Rasipuram (Salem Dt.) (on temporary affiliation).

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

1. Agricultural College, Lawley Road, Post Coimbatore.
2. College of Engineering, Guindy, Madras-25.
3. Government Arts College, Coimbatore.
4. Government Arts College, Salem.
5. Government College for Men, Kumbakonam.
6. Government Basic Training College, Orathanad (Tanjore).
7. Government Training College for Women, Coimbatore.
8. Government Training College, Komarapalayam.
9. Government Training College, Vellore (North Arcot).
10. Government Training College, Pudukottai.
11. Jawaharlal Institute of P.G. Medical Education and Research & Dhanvantri Medical College, Pondicherry-6.
12. Lady Willingdon Training College, Triplicane, Madras-5.
13. Madras Law College, Madras-1.
14. Madras Medical College, Madras-3.
15. Madras Veterinary College, Vepery, Madras-7.
16. Periyar E.V.R. Government Arts College, Tiruchirapalli (on temporary affiliation).
17. Presidency College, Triplicane, Madras-5.
18. Queen Mary's College, Mylapore, Madras-4.
19. Stanley Medical College, Madras-1.
20. Tagore Arts College, Pondicherry.

Professional Colleges

Medicine

1. Government Medical College, Chingleput (on temporary affiliation).
2. Government Medical College, Coimbatore (on temporary affiliation).

Engineering

1. Government Engineering College, Salem (on temporary affiliation).

MADHRAI UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Aditanar College of Arts and Science, P.O. Virepandianpainum, Tiruchendur (Tirunelveli).

2. Alagappa College of Physical Education, Karaikudi-4, Ramnad Distt. (on temporary affiliation).
3. Ayya Nadar Janaki Ammal College, Sivakasi (Ramanathapuram).
4. Arumugam Pillai Seethai Ammal College, Tiruppattur (Ramnad).
5. Alagappa Chettiar College of Engineering and Technology, Karaikudi-4 (Ramanathapuram).
6. Christian College, Martandam (Kanyakumari).
7. Dr. Alagappa Chettiar Training College, Alagappauram, Karaikudi.
8. G.T.N. Arts College, Karur Road, Dindigul (Madurai).
9. G. Venkataswamy Naidu College, Kovilpatti (Tirunelveli) (on temporary affiliation).
10. Hajee Karutha Rowther Howdia College, Uthamapalayam P.O. Madurai.
11. Holy Cross College, Roachnagar, Nagercoil-2.
12. Kamaraj College, Tuticorin (on temporary affiliation).
13. Lakshimipuram College of Arts and Science, Neyoor.
14. Lakshmi Teachers' Training College, Gandhigram, Madurai (on temporary affiliation).
15. Pope's College, Sawyerpuram (Tirunelveli).
16. Pioneer Kumaraswamy College, Nagercoil (on temporary affiliation).
17. Raja Dorisingam Memorial College, Sivaganga (Ramand).
18. Sri Kumara Gurupara Swamigal Arts College, Arulnandinagar Srivaikuntam (Tirunelveli).
19. Sri Palaniandavar College of Indian Culture, Palani (Madurai).
20. Sri Sathguru Sangetha Vidyalayam, Madurai.
21. Sri Palaniandavar Arts College, Palani (Madurai).
22. Saraswathi Narayanan College, Madurai (on temporary affiliation).
23. Sri Parasakthi College for Women, Courtallam (Tirunelveli).
24. Sree Devi Kumari Women's College, Kuzhithurai (Kanyakumari).
25. St. Xavier's College, Palayamkottai, Tirunelveli-2.
26. Scott Christian College, Nagercoil (Kanyakumari).
27. S. Vellaichamy Nadar College, Nagamalai, Madurai-16.
28. Seethalakshimi Achi College for Women, Pallattur (Ramnad).
29. Sarah Tucker College, Palayamkottai, Tirunelveli-7.
30. Sri Paramakalyani College, Alwarkurichi (Tirunelveli).
31. St. Jusbin's Teachers College for Women, Madurai (on temporary affiliation).
32. The Standard Fire Works Rajaratnam College for Women, Sivaksi (Ramanathapuram) (on temporary affiliation).
33. The N.V.K.S.D. Teachers College, Attor (Martandam).
34. Thiagarajar College of Preceptors, Madurai.
35. The Madura Diraviyam Thayumanayar Hindu College, Pettai (Tirunelveli-4).
36. Thiagarajar College of Engineering, Madurai-15.
37. V.V. Vanniaperumal College for Women, Virudunagar (Ramnad).
38. Vivekananda College, Agasteeswaram (Kanyakumari).

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

Affiliated Colleges

1. American College, Tallakulam, Madurai-2.

2. Alagappa College, Karaikudi-3 (Ramanathampuram).
3. Annammal Training College for Women, Tuticorin-2.
4. Fatima College, Vilangudi, Madurai-2.
5. Lady Doak College, Tallakulam, Madurai-2.
6. Madura College, Madurai-11.
7. St. John's College, Palayamkottai.
8. St. Mary's College, Tuticorin.
9. S.T. Hindu College, Nagercoil (Kanyakumari).
10. St. Ignatius Training College for Women, Polayamkottai.
11. St. Xavier's Training College, Palayamkottai.
12. Thiagarajar College, Madurai-9.
13. V.O. Chidamabaram College, Tuticorin.
14. Virudunagar Hindu Nadars' Senthikumara Nadar College, Virudunagar (Ramnad).
15. V.O. Chidambaram Training College, Tuticorin.

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Agricultural College, Vouvalthottam, near Othakkadai (Madurai).
2. Government College of Indian Systems of Medicine, Palayam Kottai, Tirunelveli-2.
3. Government Arts College for Women, Dindigul (on temporary affiliation).
4. Madurai Medical College, Madurai-13.
5. Sree Meenakshi Government College for Women, Madurai-2.
6. Tirunelveli Medical College, Tirunelveli.
7. The Setupati Government Arts College, Ramanathapuram.

MAGADH UNIVERSITY

NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Anjabit Singh College, Bikramganj (Shahabad).
2. Anugarh Memorial College, Gaya (on temporary affiliation for 3 years w.e.f. 1966-67).
3. Anugrah Narain College, Anisabad, Patna-2.
4. A.N.S. College, Barh (Patna).
5. B.S. College, Dinapore (Patna).
6. College of Commerce, Kankerbagh Road, Patna.
7. Dharichanna Kueri College (Dumri) Dumaraon, Shahabad (on temporary affiliation).
8. Gautam Budha Mahila College, Gaya.
9. Jagat Narain Lal College, Khagaul, Patna (affiliation extended for 3 years w.e.f. 1966-67).
10. Jawahar Lal Nehru College, Dehri-on-Sone (on temporary affiliation).
11. Jagjiwan College, Arrah (on temporary affiliation).
12. Jagjiwan Mahavidyalaya, Gaya (on temporary affiliation).

13. Kisan College, Sohsarai (Patna).
14. K.L.S. College, Nawadah (Gaya).
15. Mahanth Madhusudan College, Bikram (Patna) (on temporary affiliation).
16. Mahanth Mahadeva Nand Mahila Mahavidyalaya, Arrah.
17. Maharaja Bahadur Ram Ranvijoy Prasad Singh College, Arrah (Shahabad).
18. Maharishi Vishwamitra Mahavidyalaya, Buxar (Shahabad).
19. Maltidhari College, Naubatpur (Patna).
20. Ramlakhan Singh Yadav College, Bakhitapur (Patna) (on temporary affiliation) .
21. Nalanda College, Biharsharif (Patna).
22. Ram Ratan Singh College, Mokameh (Patna).
23. Sardar Vallabhbhai Patel College, Bhabua (Shahabad).
24. Satyendra Narain Sinha College, Tekari (on temporary affiliation).
25. Sheodeni College, Mehandia, Arwal Gaya.
26. Somavati Mahtab Das College, Sripalpur, Poonpoon, Patna.
27. Sri Chand Udasin College, Hilsa.
28. Sri Gadadhar Acharya Janta College, Rambagh, Bihta (Patna).
29. Sri Guru Gobind Singh College, Patna City.
30. S.P. Jain College, Sasaram.
31. S. Sinha College, Aurangabad (Gaya).
32. S.S. College, Jehanabad (Gaya).
33. Thakur Prasad Singh College, Fraser Road, Patna-1 (on temporary affiliation).

Constituent Colleges

1. Gaya College, Gaya.
2. H.D. Jain College, Arrah.

B. COLLEGE TEACHING UP TO POSTGRADUATE DEGREE

1. Bihar Veterinary College, Patna.

M.S. UNIVERSITY OF BARODA
NON-GOVERNMENT COLLEGES

A. COLLEGE TEACHING UP TO BACHELOR'S DEGREE

1. Shri M.K. Amin Arts and Science College & College of Commerce, Padra.

GOVERNMENT COLLEGE

A. COLLEGE TEACHING UP TO POSTGRADUATE DEGREE

1. Medical College, Baroda.

MARATHWADA UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Adat Vayapari Education Society's Degloor College, Degloor (Nanded) on temporary affiliation up to 14-6-70).

2. Adarsha Education Society's Arts and Commerce and Science College, Hingoli (on temporary affiliation up to 14-6-70).
3. Dayanand Education Society's Dayanand Science College, Latur (on temporary affiliation up to 14-6-70).
4. J.E.S.R.G. Bagdiya Arts, S.B.L. Commerce and R. Bazonji Science College, Jalna (on temporary affiliation up to 14-6-1970).
5. Jawahar Education Society's Arts, Science and Commerce College, Parli-vaijnath (Distt. Bhir) (on temporary affiliation up to 14-6-1970).
6. Manickchand Pahade Law College, Aurangabad (on temporary affiliation up to 14-6-1971).
7. Mahavashva Education Society, Maharashtra Udayagiri Mahavidlalaya Udgir (Osmanabad) (on temporary affiliation up to 14-6-70).
8. Nanded Education Society's Science College, Nanded (on temporary affiliation up to 14-6-71).
9. Partisthan Education Society's Partisthan Mahavidyalaya, Paithan (on temporary affiliation up to 1970).
10. Peoples Education Society's Dr. Ambedkar College of Commerce, Nagasan Vana, Aurangabad (on temporary affiliation up to June 14, 1971).
11. Peoples Education Society's Milind College of Science, Aurangabad (on temporary affiliation up to 14-6-70).
12. Peoples Education Society's Dr., Ambedkar College of Law, Aurangabad (on temporary affiliation up to 14-6-70).
13. Peoples Education Society's Milind College of Arts, Aurangabad (on temporary affiliation up to 14-6-71).
14. Shree Saraswati Bhuwan Education Society's College of Arts, Science and Commerce, Aurangabad (on temporary affiliation up to 14-6-70).
15. Shri Chhatrapati Shivaji College, Omarga (Osmanabad) (on temporary affiliation up to 14-6-70).
16. Shri Shivaji College, Kandhar. (Nanded) (on temporary affiliation up to 14-4-70).
17. The M.S.P. Mandal's Balbhim College of Arts and Science, Phir (on temporary affiliation up to 14-6-70).
18. The M.S.P. Mandal's Deogiri College, Aurangabad (on temporary affiliation up to 14-6-70).
19. The Dayanand College of Arts & Commerce, Latur (on temporary affiliation up to 14-6-70).
20. The Maulana Azad College of Arts, Science and Commerce, Rouza Baugh, Aurangabad (on temporary affiliation up to 14-6-71).
21. The M.S.P. Mandal's Shree Shivaji College of Arts and Science Parbhani (on temporary affiliation up to 14-6-71).
22. The Ramakrishna Paramhansa Mahavidyalaya, Osmanabad (on temporary affiliation up to 14th June, 1970).
23. Yogeshwari Mahavidyalaya, Akbegogai.

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

Affiliated Colleges

1. Nanded Education Society's Peoples College, Nanded.
2. Sharda Bhawan Education Society's, the Yashwant Mahavidyalaya, Nanded (on temporary affiliation up to June 14, 1970).

3. Shri Swami Vivekanand Shikshan Sanstha College of Education, Osmanabad (on temporary affiliation up to June 14, 1971).

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. Government College of Arts and Science, Aurangabad (on temporary affiliation up to 14-6-1970).
2. Government College of Education, Aurangabad (on temporary affiliation up to 14-6-1970).
3. Government College of Engineering, Aurangabad (on temporary affiliation up to 14-6-70).
4. Government Medical College, Aurangabad (on temporary affiliation).
5. Government College of Education, Nanded (on temporary affiliation up to 14-6-70).
6. Government College of Education, Parbhani (on temporary affiliation up to 14-6-70).

B. COLLEGE TEACHING UP TO POSTGRADUATE DEGREE

1. Government College of Education, Ambajogai (Bhir) (on temporary affiliation).

MEERUT UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Arya Kanya Pathshala Degree College, Hapur.
2. Arya Kanya Pathshala Degree College, Khurja.
3. A.S. Degree College, Mawana.
4. Brahm Sanskrit Mahavidyalaya Degree College, Roorkee.
5. College of Science, Gurukul Kangri.
6. Daynand Women's Training College, Dehrandun.
7. Digambar College, Dibai (Bulandshahr).
8. Durga Prasad Degree College, Anupshahr.
9. Devnagri Degree College, Gulaothi (on temporary affiliation).
10. Gochar Agriculture Degree College, Rampur Manhyran (Saharanpur).
11. Ismail National Degree College (for Women), Meerut.
12. Jain Kanya Pathshala Degree College, Muzaffarnagar.
13. Ch. Chhotu Ram Degree College, Muzaffarnagar.
14. Jatan Sarup College, Sikandrabad (Bulandshahr).
15. Krishak College, Mawana (Meerut).
16. Kanya Mahavidyalaya College, Satikund, Kankhal (Saharanpur) (on temporary affiliation).
17. K.L.D.A.V. College, Roorkee.
18. KV Degree College, Machhra (Meerut).
19. Kund Kund Jain College, Khatauli (Muzaffarnagar).
20. Kanohar Lal Mahila Mahavidyalaya, Meerut (on temporary affiliation).
21. Lajpat Rai College, Ghaziabad (on temporary affiliation).

22. Mihir Bhoj Degree College, Dadri (Bulandshahr) (on temporary affiliation).
23. M.M. Degree Colltge, Khekra (Meerut).
24. Munnalal Girls' Degree College, Saharanpur.
25. Rashtriya Kisan Degree College, Shamli (Muzaffarnagar).
26. Kisan Degree College, Simbhaoli (Meerut).
27. Rana Shiksha Shivar Degree College, Dhaulana (Meerut).
28. Shrawan Nath Muth Jawahar Lal Nehru Degree College, Hardwar.
29. Sri Sanatan Dharam Prakash Chand Girls' Degree College, Roorkee (on temporary affiliation).

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

Affiliated Colleges

1. Amar Singh College, Lakhaoti (Bulandshahr).
2. Dayanand Brijendra Swarup College, Dehradun.
3. Devanagri College, Meerut.
4. Digambar Jain College, Baraut (Meerut).
5. D.A.V. College, Bulandshahr.
6. D.A.V. College, Dehradun.
7. D.A.V. College, Muzaffarnagar.
8. Gurkul Mahavidyalaya, Jwalapur (Saharanpur).
9. Guru Ram Rai College, Dehradun.
10. Janta Vedio College, Baraut (Meerut).
11. J.V. Jain College. Saharanpur.
12. Mahadevi Kanya Pathshala College, Dehradun.
13. Maharaj Singh College, Saharanpur.
14. Meerut College, Meerut.
15. Multanimal Modi College, Modinagar.
16. M.M.H. College, Ghaziabad.
17. Municipal Postgraduate College, Mussoorie.
18. Nanak Chand Anglo-Sanskrit College, Meerut.
19. N.R.E.C. College, Khurja.
20. Raghunath Girls' College, Meerut.
21. Raja Mahendra Pratap Prem Vidyalaya College, Gurukul Narsan (Saharanpur).
22. Shambhu Dayal Degree College, Ghaziabad.
23. Sri Saraswati Vidyalaya College, Hapur.
24. S.D. College, Muzaffarnagar.
25. Vaish College, Shamli (Muzaffarnagar).
26. Vidyawati Mukand Lal Girls' Degree College, Ghaziabad.

MYSORE UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. A.V. Kanthama College for Women, Hassan (on temporary affiliation).
2. A.V. Kamalama College for Women, Davangere (on temporary affiliation).

3. Aswathaiah Esthuri Sanjeevamma National College, Gauribidanur (Kolar) (on temporary affiliation).
4. Bhandarkar's College of Arts & Science, Coondapur (on permanent affiliation for Arts and Commerce).
5. B.M. Shetty First Grade College Konanur (Hassan) (on temporary affiliation).
6. Bhadra College, Bhadravati (on temporary affiliation).
7. Cauvery College, Gonikapal (S. Coorg) (on temporary affiliation).
8. Desheeya Vidyashala College of Arts and Science, Shimogacity (on temporary affiliation).
9. D. Banumaiah's College of Commerce, Mysore.
10. D.R.M. College, Davangere (on temporary affiliation).
11. First Grade College, K.G.F. (Ooragaun) (on temporary affiliation).
12. First-Grade College of Arts and Science, Thirthahalli (on temporary affiliation).
13. First-Grade College of Arts, Science and Commerce, Sira (on temporary affiliation).
14. Govinda Dasa College, Suratkal S.K. (on temporary affiliation).
15. J.J. Medical College, Davangere (on temporary affiliation).
16. J.S.S. College of Commerce and Science, Mysore (on temporary affiliation).
17. J.S.S. College, Chamarajanagar (on temporary affiliation).
18. J.S.S. College, Nanjagud (on temporary affiliation).
19. Kalpatharu College, Tiptur (on temporary affiliation).
20. Kamala Nehru Memorial National College for Women, Shimoga (on temporary affiliation).
21. Lal Bahadur College of Arts, Science & Commerce, Sagar.
22. Mahatma Gandhi Memorial College, Udipi.
23. Malnad College of Engineering, Hassan (on temporary affiliation).
24. Manipal College of Education, Udipi (on temporary affiliation).
25. Manipal Engineering College, Manipal (on temporary affiliation).
26. M.D.T.D.B. College, Mysore (on temporary affiliation).
27. Milagres College, Kallianpur, South Kanara (on temporary affiliation).
28. Municipal First Grade College, Chintamani (on temporary affiliation).
29. National College of Commerce, Shimoga (on temporary affiliation).
30. National College of Education, Shimoga (on temporary affiliation).
31. National College of Law, Shimoga (on temporary affiliation).
32. National Evening College of Commerce, Shimoga (on temporary affiliation).
33. P.E.S. (College of Engineering, Mandya (on temporary affiliation for IV and V year).
34. Regional College of Education, Mysore (on temporary affiliation).
35. Saradavilas College, Mysore.
36. Saradavilas Law College, Mysore.
37. Saradavilas Teachers' College, Mysore (on temporary affiliation).
38. Saraswati Law College, Chitradurga (on temporary affiliation).
39. Sri Poornapragana Evening College, Udipi S.K. (on temporary affiliation).
40. Sri Dharmasthala Manjanatheswara College, Ujire (South Kanara) (on temporary affiliation).

41. Sri Gomataorwara Mahavidyalaya College of Arts, Science and Commerce, Shravenabela (on temporary affiliation).
42. Sri Venkatramana Swamy College, Bantval (S. Kanara) (on temporary affiliation).
43. Sri Mabadeswara College of Arts and Science, Kollegal (on temporary affiliation).
44. Siddaganga Institute of Technology, Tumkur (on temporary affiliation for IV and V years).
45. Shri Bhuvanendra Collegt, Karkala (S. Kanara).
46. Sri Jagadguru Chandrasekhara Bharathi Memorial College, Sringeri (on temporary affiliation).
47. Sri Siddaganga Evening College, Tumkur (on temporary affiliation).
48. Sri Jaya Chamarajendra College of Engineering, Mysore (on temporary affiliation).
49. Sree Siddaganga College of Science, Tumkur (on temporary affiliation).
50. Sri Poorna Pragna College, Udipi (on temporary affiliation).
51. Sri Mahaveera College, Moodabidri (S.K.) (on temporary affiliation).
52. St. Agnes College, Mangalore.
53. St. Aloysius College, Mangalore.
54. St. Aloysius Evening College, Mangalore (on temporary affiliation).
55. St. Ann's Training College, Mangalore.
56. St. Philomena's College, Mysore.
57. St. Philomena's College, Puttur (on temporary affiliation).
58. Teresian College Nazarbad, Mysore (on temporary affiliation).
59. The Institute of Education, Mysore.
60. The National Institute of Engineering, Mysore (on temporary affiliation).
61. The Rural College, Kanakapura (on temporary affiliation).
62. Udipi Law College, Udipi.
63. Vivekananda College of Arts, Science and Commerce, Nehrunagar, Padnoor Post, via-Kabaka, Puttur (S.K.) (on temporary affiliation).
64. Vidyodaya Law College, Tumkur (on temporary affiliation).
65. Vijaya College, Mulki (South Kanara) (on temporary affiliation).

Constituent Colleges

1. College of Music and Dance, Mysore.
2. Maharaja's College, Mysore.
3. University Evening College, Maharaja's College Buildings, Mysore.
4. Yuvaraja's College, Mysore.

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

Affiliated Colleges

1. Kasturba Medical College, Manipal (postgraduate courses are under the control of the University).
2. Institute of Social Service, Roshini, Nilaya, Mangalore (on temporary affiliation).
3. Karnataka Regional Engineering College, Suratkal (P.G. Course on temporary affiliation).

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. B.D.T. College of Engineering, Davangere (on temporary affiliation).
2. Government College, Chickmagalur (on temporary affiliation).
3. Government College, Chitradurga.
4. Government College of Education, Davangere (on temporary affiliation)
5. Government College, Hassan.
6. Government College, Kolar (on temporary affiliation).
7. Government College, Mandya.
8. Government College, Tumkur.
9. Government College, Mangalore (on temporary affiliation).
10. Government College, Mercara.
11. Government College of Education, Mangalore.
12. Maharani's College for Women, Mysore.
13. Sahyadri College, Shimoga.
14. Government College of Education, Mysore.

B. COLLEGE TEACHING UP TO POSTGRADUATE DEGREE

1. Medical College, Mysore.

NAGPUR UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Arts and Commerce College, Saoner (on temporary affiliation for 2 years from 1968-69).
2. Adarsha Mahavidyalaya (Arts and Commerce), Dhamangaon (Amarvati) (on temporary affiliation for 3 years from 1968-69).
3. Amolak Chand Mahavidyalaya, Yeotmal (on temporary affiliation up to 1969-70).
4. Anand Niketan College of Science, Arts & Commerce, Warora (Chandrapur) (on temporary affiliation).
5. Arts and Commerce College, Daryapur (on temporary affiliation).
6. Bharatiya Mahavidyalaya, Amravati (on temporary affiliation for 3 years from 1969-70).
7. C.P. and Berar Education Society's College, Nagpur (on temporary affiliation up to 1970-71).
8. Dr. Baba Saheb Ambedkar College of Arts and Commerce, Nagpur (on temporary affiliation for 3 years from 1967-68).
9. Dharampeth Mahavidyalaya, Nagpur (on temporary affiliation for 3 years from 1967-68).
10. D.V.S.P. College, Digras (Yeotmal) (on temporary affiliation up to 1969-70).
11. Degree College of Physical Education, Amravati (on temporary affiliation).
12. Ganeshdas Bhioraj Murarka College of Arts & Commerce Shegaon, District Buldana (on temporary affiliation).
13. G.S. College of Science and Arts, Khamgaon (on temporary affiliation for 3 years from 1969-70).

14. J.E.S. College of Arts and Commerce, Jalgaon (Jamod) Distt. Buldana (on temporary affiliation).
15. Jagadamba Mahavidyalaya, Achalpur City (Amravati) (on temporary affiliation for 2 years, w.e.f. 1968-69).
16. Janata College of Education, Chandrapur (on temporary affiliation for 3 years from 1967-68).
17. Jashbhai Muljibhai Patel College of Arts and Commerce, Bhandara (Maharashtra) (on temporary affiliation up to 1971-72).
18. Janata Kala Vanijya Mahavidyalaya, Malkapur (Buldana) (on temporary affiliation).
19. Janata Mahavidyalaya, Chandrapur (on temporary affiliation up to 1971-72).
20. Janaki Devi Bajaj College of Science, Wardha (on temporary affiliation for 3 years from 1967-68).
21. K.N. College of Arts and Commerce, Karanja (on temporary affiliation).
22. Lady Amritbai Daga College for Women, Nagpur.
23. Lokmanaya Tilak Mahavidyalaya, Wani (on temporary affiliation for 3 years from 1967-68).
24. Mehkar Education Society's Arts & Commerce College, Mehkar (on temporary affiliation).
25. Mahatma Fule Mahavidyalaya, Warud (on temporary affiliation up to 1970-71).
26. M. Mohta College of Science, Nagpur.
27. Mahila Mahavidyalaya Amravati (on temporary affiliation up to 1971-72).
28. Nabira Mahavidyalaya, Katol (Nagpur) (on temporary affiliation).
29. Natwarlal Maniklal Dalal College of Arts & Commerce, Gondia (Bhandara) (on temporary affiliation for 5 years from 1967-68).
30. Navjabai Hitkarini College, Brahmpuri (Chandrapur) (on temporary affiliation for 3 years from 1967-68).
31. Nehru Arts and Commerce College, Nerparsapat (Dt. Yeotmal (on temporary affiliation up to 1969-70).
32. Phulsing Naik Mahavidyalaya, Pusad (Yeotmal) (on temporary affiliation for 3 years, w.e.f. 1968-69).
33. Panjabhai Patel College of Education, Gondia (on temporary affiliation).
34. Raj Mahavidyalaya, Amravati (on temporary affiliation up to 1971-72).
35. Rajasthan Aryan Arts and Mithulalji Kocholiya Commerce Mahavidyalaya, Washim (Akola) (on temporary affiliation).
36. R.S. Bidkar Arts & Commerce College, Hinganghat (Wardha) (on temporary affiliation).
37. Samarth Mahavidyalaya, Lakhani (on temporary affiliation up to 1971-72).
38. Shrimati Binzani Mahila Mahavidyalaya, Nagpur (on temporary affiliation for 5 years from 1969-70).
39. Seth Narsinghdas Mor College of Arts and Commerce, Tu-msar (on temporary affiliation up to 1970-71).
40. Shri Gadge Maharaj Mahavidyalaya, Murtizapur (on temporary affiliation).
41. Smt. Laxmibai Radhakishan Tosnival College of Commerce, Akola (on temporary affiliation for 5 years from 1967-68).

42. Smt. Radhadevi Goenka College for Women, Akola (Maharashtra) (on temporary affiliation).
43. S.P.M. Arts and Commerce College, Chikhali (on temporary affiliation).
44. Shri Shivaji College of Education, Amravati (on temporary affiliation for 3 years from 1967-68).
45. Shri Shivaji College of Arts and Commerce, Akola (on temporary affiliation for 5 years from 1967-68).
46. Shri Shivaji College, Akot (Akola) (on temporary affiliation for 3 years from 1967-68).
47. Shri Vanijya Mahavidalaya, Yeotmal (on temporary affiliation for 5 years from 1968-69).
48. Sitabai Arts College, Akola.
49. St. Francis De Sales College, Nagpur.
50. Swavalambi College of Education, Wardha (on temporary affiliation up to 1971-72).
51. Shri Shivaji Education Society's Science College, Congress Nagar (on temporary affiliation up to 1972).
52. The Jijamata Mahavidyalaya, Buldana (on temporary affiliation for 3 years from 1967-68).
53. The Krishak Education Society's Arts and Commerce College, Arvi (on temporary affiliation for 3 years from 1967-68).
54. The Yeshwant Arts College, Wardha (on temporary affiliation for 3 years from 1967-68).
55. Vidarbha Ayurved Mahavidyalaya, Amravati (on temporary affiliation).

University College

1. University College of Law, Nagpur.

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

Affiliated Colleges

1. Dhanwate National College, Nagpur (on temporary affiliation for 10 years from 1962-63).
2. G.S. College of Commerce, Wardha.
3. G.S. College of Economics & Commerce, Nagpur.
4. Hislop College, Nagpur.
5. Shri Shivaji College, Amravati (on temporary affiliation for 5 years from 1967-68).
6. S.B. City College, Nagpur.

University Colleges

1. Laxminarayan Institute of Technology, Nagpur.
2. University Training College, Nagpur.

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. College of Engineering, Amravati (on temporary affiliation).
2. Government College of Education, Akola (on temporary affiliation for 3 years from 1967-68).
3. Government College of Education, Bhandara (on temporary affiliation up to 1971-72).

4. Government College of Education, Yeotmal (on temporary affiliation).
5. Government Aurvedic College, Nagpur (on temporary affiliation up to 1970-71).

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

1. College of Science, Nagpur.
2. Government Postgraduate Basic Training College, Amravati (on temporary affiliation for 3 years from 1967-68).
3. Medical College, Nagpur.
4. Nagpur Mahavidyalaya, Nagpur.
5. Vidarbha Mahavidyalaya, Amravati.
6. Visvesaraya Regional Engineering College, Nagpur (on temporary affiliation up to 1972-73).

NORTH BENGAL UNIVERSITY

NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Alipurduar Collegt, Alipurduar Court (Jalpaiguri).
2. Ananda Chandra College, Jalpaiguri.
3. Ananda Chandra Training College, Jalpaiguri.
4. Balurghat College, Balurghat (West Dinajpur).
5. Chanchal College P.O. Chanchal (Malda) (on temporary affiliation).
6. Dinhata College, Dinhata, Cooch Behar.
7. Kalimpong College, Kalimpong (Darjeeling).
8. Kaliyaganj College, Kaliyaganj (on temporary affiliation).
9. Kurseong College, Kurseong (on temporary affiliation).
10. Loreto College, South Field (Darjeeling).
11. Malda College, Malda.
12. Mathabhanga College, P.O. Mathanjanga (Cooch Behar) (on temporary affiliation).
13. Prasanna Dev Women's College, Jalpaiguri.
14. Salesian College. Sonada (Darjeeling).
15. Siliguri College, Siliguri (Darjeeling).
16. Shree Ram Krishna B.T. College, Darjeeling.
17. St. Joseph's College, North Point, Darjeeling.
18. Sansi College, P.O. Sansi (Malda) (on temporary affiliation).

University College

1. Raiganj College, Raiganj (West Dinajpur).

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. Government Teacher's Training College, Malda.
2. Victoria College, Cooch Behar.

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

1. Darjeeling Government College, Darjeeling.
2. Jalpaiguri Government Engineering College, Jalpaiguri.

ORISSA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

University Constituent Colleges

1. College of Basic Science and Humanities, Bhubaneswar.
2. The College of Agricultural Engineering and Technology, Bhubaneswar.

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

University Constituent Colleges

1. College of Agriculture, Bhubaneswar.
2. College of Veterinary and Animal Husbandry, Bhubaneswar.

OSMANIA UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Andhra Mahila Sabha (Evening College for Women, Hyderabad (on temporary affiliation for 3 years, w.e.f. 1967-68).
2. Adarsh College of Science, Commerce and Arts, Jammi Kunta (on temporary affiliation).
3. Arts & Science College, Mehboobnagar (A.P.) (provisional affiliation).
4. Andhra Girls' College, Khammam (A.P.) (provisional affiliation).
5. Anwar-ul-Uloom College, Hyderabad.
6. Anwar-ul-Uloom College (Evening Session) of Arts and Commerce, near Mallapally, Hyderabad (on temporary affiliation).
7. Arts & Science College, Jadcharla (Mehboobnagar) (on temporary affiliation).
8. Arts & Science College, Jagtial, Karimnagar Distt. (on temporary affiliation).
9. A.V. College of Arts and Commerce (Evening Session) Hyderabad (on temporary affiliation).
10. A.V. College of Arts, Science and Commerce, Hyderabad (on temporary affiliation).
11. Arts and Science College, Mehboobnagar (Evening) (on temporary affiliation).
12. Arts and Science College, Armoor (on temporary affiliation).
13. Agarwal Evening College (Science) Hyderabad (on temporary affiliation).
14. Amrat Kapadiya Navjiwan Women's College, Hyderabad (on temporary affiliation).
15. Badruka College of Commerce and Arts, Hyderabad.
16. Badruka College of Commerce and Arts (Evening) Hyderabad.
17. College of Arts and Science, Kamaraddy (Nizamabad) (on temporary affiliation).
18. Chanda Kantaiah Memorial Arts and Science College, Warangal (on temporary affiliation).
19. Hindi Mahavidyalaya, Hyderabad (on temporary affiliation).
20. Kakatiya Medical College, Warangal (on temporary affiliation).

21. Mumtaz College, Hyderabad.
22. Nanak Ram Bhagwan Das Science College, Hyderabad.
23. New Science College, Hyderabad.
24. New Science College (Evening) Hyderabad (on temporary affiliation).
25. R.B.V.R.R. Women's College, Hyderabad.
26. St. Ann's College of Education, Secundrabad (on temporary affiliation).
27. Sri Venkatewara Arts & Science College, Palem (Mehboobnagar) (on provisional affiliation).
28. Sri Ramachandra Arts and Science College, Kothagudam (provisionally affiliated).
29. St. Francis College for Women, Secunderabad (on temporary affiliation).
30. S.V.E.S. Telugukalasala (Evening) Hyderabad (on temporary affiliation).
31. Urdu Arts (Evening) College, Himayatnagar (Hyderabad).
32. Vanitha Mahavidyalaya, Hyderabad (on temporary affiliation).
33. Vivek Vardhini College, Hyderabad.
34. Vivek Vardhini (Evening) College of Arts, Hyderabad.
35. Women's College, Nizamabad (on temporary affiliation).
36. Wanaparthy College, Wanaparthy (on temporary affiliation).

Constituent Colleges

1. College of Arts and Science, Warangal.
2. Evening College, Warangal.
3. Evening College, Hyderabad.
4. Evening College, Secunderabad.
5. Saifabad Science College, Hyderabad.
6. Secunderabad Arts and Science College, Secunderabad.
7. Women's College, Hyderabad.

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

Constituent Colleges

1. Law College (Evening Session) Tilak Road, Hyderabad.
2. Nizam College, Hyderabad.

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. Gandhi Medical College, Hyderabad (on temporary affiliation for pre-clinical courses).
2. Girraj Government Arts College, Nizamabad.
3. Government Arts and Science College, Adilabad.
4. Government Arts and Science College, Siddipet.
5. Government City Science College, Hyderabad (on temporary affiliation).
6. Government College of Nursing, Hyderabad.
7. Government Teachers' Training College, Warangal.
8. Government Training College, Hyderabad.
9. Government Nizamia Tibbi College, Hyderabad (on temporary affiliation).
10. Government Ayurvedic College, Hyderabad (on temporary affiliation).
11. Girraj Government Arts College (Evening) Nizamabad (on temporary affiliation).

12. Government Arts and Science College, Mancherial (on temporary affiliation).
13. Government College of Physical Education, Hyderabad (on temporary affiliation).
14. Government Pingle College for Women, Warangle (on temporary affiliation).
15. Government College of Fine Arts and Architecture, Hyderabad (on temporary affiliation).
16. M.A.L.D. Government Arts & Science College, Gadwal (on temporary affiliation for B.Sc.).
17. Nagarjuna Government Arts and Science College, Nalgonda.
18. Navarjun Sagar Government Engineering College, Hyderabad (on temporary affiliation).
19. Nagarjuna Government Evening College, Nalgonda (on temporary affiliation).
20. S.R.R. Government Arts College (Evening), Karinnagar (on temporary affiliation).
21. S.R. & B.G.N.R. Arts and Science Evening College, Khammameth.
22. S.R. & B.G.N.R. Government Arts & Science College, Khammameth.
23. S.R.R. Government Arts & Science College, Karimnagar

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

1. Osmania Medical College, Hyderabad (for Undergraduate courses, (a) in Medicine the College is under the Government Management and for Postgraduate courses, it is under the management of the University).
2. Regional Engineering College, Warangal (on temporary affiliation).

PANJAB UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Ahir College, Rewari.
2. Arya College, Ludhiana.
3. Arya College, Panipat.
4. Arya Girls' College (Quetta), Ambala Cantt.
5. A.I.J. Heores Memorial College, Rohtak.
6. A.S. College, Khanna.
7. Bhagwanti Laroyia Memorial Girls' College, Nawanshahr, Doaba.
8. Bhagat Phool Singh College of Education for Girls, Khanpur Kalan.
9. Braj Mandal College, Hodal.
10. Bhagat Phool Singh Memorial Girls College, Khanpur Kalan (on temporary affiliation).
11. Chhaju Ram College of Education, Hissar.
12. Chhotu Ram Arya College, Sonepat.
13. Chhotu Ram College of Education, Rohtak.
14. Chhaju Ram Memorial Jat College, Hissar.
15. Dayanand Amar Nath College of Education, Nawanshahr Doaba.
16. Dayanand College, Hissar.
17. Dev Samaj College for Girls, Ambala City.

18. Dronacharya, S.D. College, Gurgaon.
19. Dayal Singh College, Karnal.
20. D.A.V. College of Education for Women, Karnal.
21. D.A.V. College, Abohar.
22. D.A.V. College, Ambala City.
23. D.A.V. College, Chandigarh.
24. D.A.V. College for Women, Karnal.
25. D.A.V. College of Education, Hoshiarpur.
26. D.A.V. College for Girls, Yamuna Nagar.
27. D.A.V. College, Maloul.
28. Dayanand Medical College, Ludhiana.
29. D.A.V. College for Women, Lawrence Road, Amritsar.
30. D.A.V. College, Sadhura (Ambala).
31. D.A.V. College of Education for Women, Amritsar.
32. D.A.V. College of Education, Abohar.
33. D.M. College, Moga.
34. D.M. Institute of Education, Moga.
35. Fateh Chand College for Women, Hissar.
36. G.M.N. College, Ambala Cantt.
37. Goswami Genesh Dutt College, Baijnath (Kangra).
38. Govind National College, Govindnagar, Narangwal (Ludhiana).
39. Guru Nanak College of Education for Women, Kapurthala.
40. Guru Gobind Singh Republic College, Jandiala (Jullundur).
41. Gandhi Vidya Mandir, Charkhi Dadri.
42. Guru Nanak College, Guru Teg Bahadur Garh (Moga).
43. Guru Nanak College, Killianwali P.O., Mandi Dabwali.
44. Guru Nanak Engineering College, Ludhiana.
45. Guru Nanak Khalra College, Yanunanagar.
46. G.G.N. Khalsa College, Ludhiana.
47. G.H.G. Khalsa College, Gurusar Sadhar.
48. G.H.G. Khalsa College of Education, Gurusar Sadhar (Ludhiana).
49. G.H.G Harprakash College of Education for Women, Sidhwan Khurd.
50. Hindu Girls' College, Jagadhri.
51. Hindu College of Education, Sonepat.
52. Hindu National College, Hariana.
53. Haryana War Heroes Memorial College, Gohana (Rohtak).
54. I.B. College, Panipat.
55. Kamla Mtmorial College, Narwana.
56. Khalsa College, Garhdiwala, Hoshiarpur.
57. Khalsa College of Education, Amritsar.
58. Khalsa College for Women, Ludhiana.
59. Khalsa College of Education, Muktsar.
60. Khalsa College for Women, Sidhwan, Khurd.
61. Kishan Lal Public College, Rewari (Gurgaon).
62. K.M. College of Education, Bhiwani.
63. Lajpat Rai Memorial College, Jagraon.
64. Lajpat Rai Centenary College, Dhudike (Dt. Ferozopore) (on temporary affiliation).
65. Lyallpur Khalsa College for Women, Jullundur.
66. Mata Ganga Girls College, Taran Taran.

67. Malwa Central Training College of Education, Ludhiana.
68. Malwa College, Bondli Samrala (Ludhiana).
69. Maharana Pratap College (for Women) Mandi Dabwali (on temporary affiliation).
70. Montgomery G.N. College of Education, Jullundur.
71. Mohindergarh Degree College, Mohindergarh.
72. Mukand Lal National College, Yamuna Nagar.
73. M.R. College, Fazilka.
74. Mehr Chand Mahajan, D.A.V. College for Women, Sector 36/A, Chandigarh.
75. Master Tara Singh Memorial College for Women, Ludhiana (on temporary affiliation).
76. Nehru Memorial College, Hansi.
77. National College, Sathiala.
78. National College, Sirsa.
79. Nehru College, Ajronda, Faridabad.
80. Phagwara College for Women, Phagwara.
81. Radha Krishna Arya College, Nawanshahr Doaba.
82. Rana Padam Chand S.D. Bhargava College, Simla.
83. Ramgarhia College of Education, Phagwara.
84. R.R. Bawa D.A.V. College for Girls, Batala (Gurudaspur).
85. R.K.S.D. College, Kaithal
86. R.S.D. College, Ferozepur.
87. Sri Guru Arjun Dev College, Taran Taran (Amritsar).
88. Shahzadanand College for Women, Amritsar.
89. Sikh National College, Banga.
90. Sri Guru Gobind Singh College, Chandigarh.
91. Sikh National College, Qadian.
92. Satish Public College of Education, Rewari (on temporary affiliation).
93. S.D.P. College for Women, Ludhiana.
94. Sohan Lal College of Education, Ambala City.
95. S.A. Jain College, Ambala City.
96. S.D. College, Palwal.
97. S.G.G.S. Khalsa College, Mahilpur.
98. S.M.D.R.S.D College, Pathankot.
99. Technological Institute of Textiles, Bhiwani.
100. Vaish College, Bhiwani.
101. Vaish College, Rohtak.
102. Vaish College of Education, Rohtak (on temporary affiliation).

University Colleges

1. Panjab University Evening College, Jullundur.
2. Panjab University Evening College, Rohtak.
3. Panjab University Evening College, Simla.

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

Affiliated Colleges

1. Baring Union Christian College, Batala.
2. Christian Medical College, Ludhiana.
3. Dev Samaj College for Women, Ferozepore City.

4. Doaba College, Jullundur.
5. D.A.V. College, Amritsar.
6. D.A.V. College, Hoshiarpur.
7. D.A.V. College, Jullundur.
8. Dev Smaj College of Education for Women, Ferozepore.
9. Hans Raj Mahila Mahavidyalaya, Jullundur.
10. Hindu College, Amritsar.
11. Hindu College, Sonepat.
12. Kanya Mahavidyalaya, Jullundur.
13. Khalsa College, Amritsar.
14. Lyallpur Khalsa College, Jullundur.
15. Ramgarhia College, Phagwara.
16. Rao Birendra Singh College of Education, Rewari.
17. S.D. College, Ambala Cantt.

University College

1. Panjab University Evening College, Chandigarh.

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. College of Architecture, Chandigarh.
2. College of Nursing, Chandigarh.
3. G.B. Pant Memorial Government College, Rampur, Bushahor.
4. Government College of Education, Chandigarh.
5. Government College of Education, Dharamsala.
6. Government College of Education, Solan.
7. Government College, Chandigarh.
8. Government College, Dharamsala.
9. Government College, Gurudaspur.
10. Government College, Gurgaon.
11. Government College, Hissar.
12. Government College, Jind.
13. Government College, Muktsar.
14. Government College, Nahan.
15. Government College, Narnaul.
16. Government College, Hamirpur, District Kangra.
17. Government College, Kulhu.
18. Government College, Solan.
19. Government College, Tanda Urmar.
20. Government College for Women, Amritsar.
21. Government College for Women,, Ludhiana.
22. Government College for Women, Rohtak.
23. Government Degree College, Bilaspur.
24. Government Degree College, Chamba.
25. Government College, Rohtak.
26. Government Evening College, Ludhiana.
27. Government College of Science Education and Research, Jagraon (Ludhiana) (on temporary affiliation).
28. Government Evening College, Bahadurgrh (Haryana).

29. Government Arts College, Andaman & Nicobar Islands, Port-Blair (on temporary affiliation).
30. Government Degree College, Una (on temporary affiliation).
31. Government College of Home Science, Chandigarh.
32. Nehru College, Jhajjar.
33. State College of Sports, Jullundur.
34. Vallabh Mahavidyalaya, Mandi.

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

1. Central Research Institute, Kasuli.
2. Dairy Science School, Karnal.
3. Dental College, Amritsar.
4. Government College, Hoshiarpur.
5. Government College, Ludhiana.
6. Government College of Education, Simla.
7. Government Randhir College, Kapurthala.
8. Government College for Women, Chandigarh.
9. Government Training College, Jullundur.
10. Himchal Agricultural College, Solan (Mahasu).
11. Medical College, Amritsar.
12. Medical College, Rohtak.
13. Panjab Engineering College, Chandigarh.

PATNA UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Constituent Colleges

1. Bihar College of Engineering, Patna.
2. B.N. College, Patna.
3. Magadh Mahila College, Patna.
4. Patna College, Patna.
5. Patna Law College, Patna.
6. Patna Science College, Patna.
7. Patna Training College, Patna.
8. Patna Women's College, Patna.
9. Patna Women's Training College, Patna.
10. P.W. Medical College, Patna.

POONA UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Arts, Science and Commerce College, Bhiwandi, district Thana (on temporary affiliation for 3 years from June, 1968).
2. Arts, Science and Commerce College, Nandurbar, Dhulia (on temporary affiliation till 1970).
3. Anna Saheb Awate College, Manchar (Distt. Poona) (on temporary affiliation up to 1972).

4. Baramati College, Baramati, Poona (on temporary affiliation).
5. Bhusawal Arts and P.O. N. Commerce College, Bhusawal, Jalgaon gar) (on temporary affiliation).
6. College of Education, Ahmednagar (on temporary affiliation).
7. Chandrarup Dakle Jain College of Commerce, Shrirampur (Ahmednagar) (on temporary affiliation).
8. College of Education, Shivaginagar Nasik (on temporary affiliation).
9. College of Education, Jalgaon (on temporary affiliation).
10. College of Education, Ulhasnagar Thana (on temporary affiliation).
11. Dr. Babasheb Ambedkar College of Arts, Science and Commerce, Mahod Kolaba (on temporary affiliation).
12. Gokhale Education Society's College of Education, Sangmner Distt. Ahmednagar (on temporary affiliation up to 1972).
13. Janta Mahavidyalaya, Pathardi (Distt. Ahmednagar) (on temporary affiliation).
14. K.J. Somaiya College of Arts and Commerce, Kopargaow (on temporary affiliation up to 1972).
15. Karjat College, Karjat (Ahmednagar) (on temporary affiliation).
16. M.S.G. Arts, Science and Commerce College, Malegaon, Nasik (on temporary affiliation).
17. N.V.P. Mandal's Arts and Commerce College, Lasalgaon (on temporary affiliation).
18. Pemraj Sarda College, Ahmednagar (on temporary affiliation).
19. R.N. Chandok Arts and J.D. Bytco Commerce & N.S. Chandok Science College, Nasik Road.
20. R.B. Narayarnao Borawke College, Shrirampur, Ahmednagar (on temporary affiliation).
21. Shri Sadguru Gangegeer Maharaj College of Science, Kopangaon (on temporary affiliation for 3 years from 17-11-67).
22. S.P.D.M. Arts & S.B.B. & S.H.D. Commerce College, Shirpur (Dhulia) (on temporary affiliation).
23. S.S.V.P. Sanstha's Science College, Dhulia (on temporary affiliation from June, 1967).
24. Smt. Chandibai Himathmal Mansukhani College, Ulhasnagar-3 (Thana) (on temporary affiliation).
25. Vidyawardhini Sabhas Arts and Commerce College, Dhulia (on temporary affiliation).

Constituent Colleges

1. Fergusson College, Poona.
2. M.E.S. College of Arts and Science, Poona.
3. M.E.S. College of Commerce, Poona-4 (on temporary affiliation).
4. Ness Wadia College of Commerce, Poona (on temporary affiliation up to 1972).
5. Nowrosjee Wadia College, Poona.
6. Sir Parshurambhau College, Poona-9.
7. Shri Sahu Mandir Mahvidyalaya, Poona-9. (on temporary affiliation).
8. St. Miras College for Girls, Poona (on temporary affiliation).

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

Affiliated Colleges

1. Arts, Science and Commerce College, Faizpur (on temporary affiliation).
2. Arts, Science and Commerce College, Chalisgaon, Jalgaon. (on temporary affiliation up to June, 1970).
3. Ahmednagar College, Ahmednagar.
4. B.Y.K. College of Commerce, Nasik.
5. College of Education, Dhulia (on temporary affiliation).
6. H.P.T. College, Nasik.
7. J.S.M. College of Arts, Science and Commerce, Alibag (Kolaba) (on temporary affiliation).
8. M.J. College of Arts and Science, Jalgaon.
9. Partap College, Amalner Jalgaon.
10. R.K. Talreja College of Arts, Science and Commerce, Ulhasnagar-3.
11. S.S.V.P. Sanstha's Arts and M.F.M.A. Commerce College, Dhulia (on temporary affiliation).
12. Sangamner Nagarpalika Arts and Commerce & B.N. Sarda Science College, Sangamner (on temporary affiliation).

Constituent Colleges

1. B.M.College of Commerce, Poona.
2. Law College, Poona-4.
3. Tilak College of Education, Poona-9.
4. Tilak Ayurveda Mahavidyalaya, Poona.

Constituent Recognized Institutions

1. Bhandarkar Oriental Research Institute, Poona.
2. College of Military Engineering, Dapodi, Poona-12.
3. Deccan College Postgraduate and Research Institute, Poona-6.
4. Gokhale Institute of Politics and Economics, Poona-4.
5. Maharashtra Association for Cultivation of Science, Poona-4.

GOVERNMENT COLLEGES

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

1. Armed Forces' Medical College, Poona-1.
2. B.J. Medical College, Poona-1.
3. College of Engineering, Poona-5.

PUNJAB AGRICULTURAL UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Constituent Colleges

1. College of Agriculture, Palampur.
2. College of Home Science, Ludhiana.

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

Constituent Colleges

1. College of Agriculture, Hissar.
2. College of Agriculture, Ludhiana.

3. College of Veterinary Medicine, Hissar.
4. College of Basic Sciences & Humanities, Ludhiana.
5. College of Animal Science, Hissar.
6. College of Agricultural Engineering, Ludhiana.

PUNJABI UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Akal College, Mastuana.
2. Gurukashi College, Damdama Sahib (on temporary affiliation).
3. Mata Gujri College, Fatchgarl Sahib (Sirhind).
4. Nehru Memorial College, Mansa.
5. Patel Memorial National College, Rajpura.
6. Rai Bahadur Multani Mal Modi College, Patiala.
7. Shri Santan Dharam Girls College, Bhatinda.
8. S.G.T.B. Khalse College Anandpur Sahib (Rupar).
9. S.D. College, Barnala.
10. Thapar Institute of Engineering & Technology, Patiala.
11. Tapasvipuran Das Malwa College, Rampur Phool (Bhatrida).

B. COLLEGE TEACHING UP TO POSTGRADUATE DEGREE

1. Khalsa College, Patiala.

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. Dental College, Patiala.
2. Government Bikram College of Commerce, Patiala.
3. Government Rajindra College, Bhatinda.
4. Government Training College, Farid Kot.
5. Government Ripudaman College, Nabha.
6. Government College, Rupar.
7. Government College, Makerkotle.
8. Government Ranbir College, Sangrur.

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

1. Government College for Women, Patiala.
2. Government College of Physical Education, Patiala.
3. Government Medical College, Patiala.
4. Government Brijandra Colliege, Faridkot.
5. Mahendra College Patiala.
6. State College of Education, Patiala.

RAJASTHAN UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Ayurvedic Vishwa Bharti, Sardarshahr (on temporary affiliation).

2. Agarwal College, Jaipur (on temporary affiliation).
3. Bhagwan Das Todi College, Lachhmangarh (Sikar) (on temporary affiliation).
4. B.J.S.R. Jain College, Bikaner.
5. Chirawa College, Chirawa.
6. G.V. College of Agriculture, Sangaria (on provisional affiliation for (i) Pre-professional (ii) I year T.D.C.—Agriculture II year Agr. and III year Agr.).
7. Gramothan Vidyapeeth Shiksha Mahavidyalaya, Sangaria (on temporary affiliation).
8. Hit Kari Co-operative Women's College of Education, Kota (Rajasthan) (on temporary affiliation).
9. Indira Gandhi Balika Niketan College, Ardawata, Distt. Jhunjhunu (on temporary affiliation).
10. Jawahar Lal Nehru Teachers' Training College, Kota (on temporary affiliation).
11. Kanoria Mahila Mahavidyalaya, Jaipur (on temporary affiliation).
12. Maharishi Dayanand College, Shri Ganganagar (on temporary affiliation).
13. Mahatma Gandhi Sandhya Mahavidyalaya, Sriganganagar (on temporary affiliation).
14. Nehru College of Education, Hindon City (on temporary affiliation).
15. Nehru Memorial Degree College, Hanumangarh Town (on temporary affiliation).
16. Regional College of Education, Ajmer. (One Year Teacher Education Course in Science, Commerce, Agriculture, Technology and Home Science, (ii) Four Year Teacher Education Course in Technology and Science and B.Ed. Craft).
17. Rajasthan Vidyapeetha Vijay Singh Pathik Shramjeevi College, Ajmer (on temporary affiliation).
18. Shri Gandhi Shikshak Mahavidyalaya, Gulabpura (Distt. Bhilwara) (on temporary affiliation).
19. Seth G.R. Chamria College, Fatehpur (on temporary affiliation).
20. Seth Moti Lal College, Jhunjhunu.
21. Seth R.N. Ruia College, Ramgarh (on temporary affiliation for T.D.C. Arts, Commerce and Science).
22. Sharda Sadan College, Mukundgarh.
23. Shri Nehru Shardapeeth, Bikaner (on temporary affiliation).
24. Shri Jain Teachers Training College, Alwar (on temporary affiliation).
25. Shri Lal Bahadur Shastri Evening College, Jaipur (on provisional affiliation for PUC Arts and T.D.C.).
26. Shri Parashiwnath Umed Degree College, Falna (on temporary affiliation).
27. Shri Swaroop Govind Pareek Teachers Training College, Jaipur (on temporary affiliation).
28. Sophia Girls' College, Ajmer (T.D.C. Sc.).
29. S.G.N. Khalsa College, Sri Ganganagar.
30. S.S.G. Pareek College, Jaipur (on temporary affiliation).
31. S.S. Jain Subodh College, Jaipur (on temporary affiliation).

32. Sonadevi Sethia Girls' College, Sujangarh. Distt. Churu, Rajasthan (on temporary affiliation).
33. Shri Bajrang Teachers Training College, Deeg (on temporary affiliation).

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

Affiliated Colleges

1. Banasthali Vidyapeeth College of Education, Banasthali (on temporary affiliation for M.Ed.).
2. Banasthali Vidyapeeth, Banasthali (on temporary affiliation in Drawing and Painting & Music for M.A.).
3. Basic Teachers' Training College, Gandhi Vidya Mandir, Sardarshar.
4. Dayanand College, Ajmer.
5. Jai Lal Institute of Education, Ajmer (M.Ed. on provisional affiliation).
6. Seth G.B. Podar College, Nawalgarh.
7. Shri Jain Postgraduate College, Bikaner (on temporary affiliation for M.Com.).
8. Seth G.L. Bihani S.D. (Postgraduate) College, Sriganganagar (Rajasthan) (on temporary affiliation for Postgraduate Course).
9. Savitri Girls' College, Ajmer (on temporary affiliation for M.Com.).

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. Bangaur College, Didwana.
2. Bangur College, Pali (T.D.C. Arts and Commerce) (on temporary affiliation).
3. Choudhary Balu Ram Godhra Government Girls' College, Sriganganagar.
4. College of Nursing, Jaipur (on temporary affiliation for 1st year, 2nd year, 3rd and 4th year Degree Course in B.Sc. Nursing).
5. Dr. Sampurnanand Medical College, Jodphur (on temporary affiliation for first M.B.B. course).
6. Government Ayurvedic College, Jaipur (on temporary affiliation up to 1972).
7. Gyani Ram Harak Chand College of Arts and Commerce, Sujangarh (on temporary affiliation).
8. Gori Devi Government College for Women, Alwar (on temporary affiliation).
9. Government College, Barmer (on temporary affiliation).
10. Government College, Banswara (on temporary affiliation).
11. Government College, Baran (on temporary affiliation).
12. Government College, Bhinmal (Jalore) (on temporary affiliation).
13. Government College, Dholpur (T.D.C. Arts & Commerce) (on temporary affiliation).
14. Government College, Bundi (on temporary affiliation).
15. Government College, Dausa (T.D.C. Arts & Commerce) (on temporary affiliation).
16. Government College, Dungarpur (T.D.C. Arts) (on temporary affiliation).
17. Government College, Jhalawar (on temporary affiliation).

18. Government College, Kotputli (on temporary affiliation).
19. Government College, Karauli (T.D.C. Arts & Science) (on temporary affiliation).
20. Government College, Kishangarh (on temporary affiiliation).
21. Government College, Nathdwara (on provisional affiliation for T.D.C. Arts, Science and Commerce).
22. Government College, Shahpura (Bhilwara) (on temporary affiliation).
23. Government College, Chittorgarh (on temporay affiliation).
24. Government College, Rajgarh (Alwar) (on temporary affiliation).
25. Government College, Sirohi (on temporary affiliation up to 1970).
26. Government College, Pratapgarh (Raj) (on temporary affiliation).
27. Government College, Tonk (on temporary affiliation in T.D.C. Science).
28. Government Teachers' Training College, Ajmer.
29. Government Teachers' Training College, Bikaner.
30. Government College, Jalcre (on temporary affiliation).
31. Janki Devi Bajaj Girls' College, Kotha (on temporary affiliation in T.D.C. Arts & Science).
32. Jawaharlal Nehru Medical College, Ajmer (on temporary affiliation up to 1971).
33. Lohia College, Churu (on temporary affiliation for T.D.C. Biology, Botany and Zoology and permanent affiliation for Arts, Commerce and Science—Physics, Chemistry and Math.).
34. M.S. College for Women, Bikaner (on temporary affiliation for T.D.C. Science and permanent affiliation for T.D.C. Arts).
35. Moti Lal Bengani Science College, Ladnun (on temporary affiliation).
36. Ravindra Nath Tagore Medical College, Udaipur (on permanent affiliation for 1st and 2nd year M.B.B.S. examination and provisional affiliation for final M.B.B.S. examination).
37. Seth Budhmal Dugar College, Sardarshahr (T.D.C. Arts & Commerce) (on temporary affiliation).
38. Seth Rameshwanlal Saharia Government Degree College, Kaladera (Jaipur) (on temporary affiliation in B.Sc. T.D.C., permanent in T.D.C. Arts and Commerce).
39. S.K. College, Sikar (on temporary affiliation in T.D.C. Science and Commerce and permanent in T.D.C. Arts).
40. S.N.K.P. Government College, Neem Ka Thana (on temporary affiliation).
41. Shri Madan Mohan Malviya Government Ayurvedic College, Udaipur (on temporary affiliation).

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

1. Dungar College, Bikaner.
2. Government College, Bhilwara.
3. Government College (for boys) Sriganganagar (on temporary affiliation).
4. Government College, Ajmer.
5. Government College, Kota.
6. Malviya Regional Engineering College, Jaipur (on temporary affiliation).
7. M.S.J. College, Bharatpur (on temporary affiliation up to 1971).
8. Raj Rishi College, Alwar (on temporary affiliation).
9. S.D. Government College, Beawer.

10. S.M.S. Medical College, Jaipur.
11. Sardar Patel Medical College, Bikaner (on permanent affiliation for M. Sc., Medical in Anatomy and Physiology branches—M.B.B.S. Part I & II and Final M.B.B.S. and D.O.M.S.).

RANCHI UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Birsa College, Khunti (on temporary affiliation).
2. Baldeo Sahu Mahavidyalaya, Lohardaga (on temporary affiliation).
3. Bholaram Shiblall Karakia College, Maithon (on temporary affiliation).
4. Chatra College, Chatra (Hazaribagh) (on temporary affiliation).
5. Chotangpur Law College, Ranchi.
6. Doranda College, Doranda (Ranchi) (on temporary affiliation).
7. Ganesh Lal Agarwal College, Daltonganj.
8. Giridih College, Giridih.
9. Gumla College, Gumla (on temporary affiliation).
10. Jamshedpur Co-operative College, Jamshedpur.
11. Jamshedpur Women's College, Jamshedpur.
12. Jamshedpur Workers' College, Ranchi (on temporary affiliation).
13. Karim City College, Jamshedpur (on temporary affiliation).
14. Kodarma Jain College, Jhumri Telaiya,
15. Krishna Balav College, P.O. Berno (Hazaribagh) (on temporary affiliation).
16. K. B. Women's College, Hazaribagh (on temporary affiliation).
17. Mahatma Gandhi Memorial Medical College, Jamshedpur (on temporary affiliation).
18. Marwari College, Ranchi (on temporary affiliation).
19. P.K. Roy Memorial College, Dhambad (on temporay affiliation).
20. Raja Shib Prashad College, Jharia.
21. Ramgarh College, Ramgarh (on temporary affiliation).
22. Ram Sahai Mull More College, Govindpur (Dhanbad) (on temporary affiliation).
23. Simdega College, Simdega (on temporary affiliation).
24. Sindri College, Sindri (on temporary affiliation).
25. St. Xavier's College, Ranchi.
26. S.S.L.N.T. Mahila Mahavidyalaya, Dhanbad.

Constituent Colleges

1. Ranchi College, Ranchi.
2. St. Columba's College, Hazaribagh.
3. Tata College, Chaibasa.
4. Women's College, Ranchi.

B. COLLEGE TEACHING UP TO POSTGRADUATE DEGREE

1. Birla Institute of Technology, Mesra, Ranchi.

GOVERNMENT COLLEGES

A. COLLEGE TEACHING UP TO BACHELOR'S DEGREE

1. Ranchi College of Veterinary Science and Animal Husbandry, Kanke (Ranchi) (on temporary affiliation).

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

1. Bihar Institute of Technology, Sindri, Dhanbad.
2. Ranchi Agricultural College, Kanke (Ranchi).
3. Rajendra Medical College, Ranchi (on temporary affiliation).
4. Regional Institute of Technology, Jamshedpur (on temporary affiliation).
5. Teachers Training College, Ranchi (on temporary affiliation).

RAVI SHANKAR UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Arts and Commerce College, Baloda Bazar (on temporary affiliation up to 30-6-1972).
2. Arts College, Kharod (on temporary affiliation up to 30-6-72).
3. B.P. Arts and Commerce College, Arang (on temporary affiliation).
4. Dhamtari Science, Arts and Commerce College, Dhamtari (on temporary affiliation).
5. Gajanand Agarwal Degree College, Bhatapara (on temporary affiliation).
6. Gramya Bharati Degree College, Kanker (on temporary affiliation up to 30-6-72).
7. Janjgir Degree College, Janjgir (on temporary affiliation).
8. Jawahar Lal Nehru Memorial Mahavidyalaya Dongargarh (on temporary affiliation up to 30-6-72).
9. Jawahar Lal Nehru Degree College (Arts & Commerce), Sakti (Bilaspur) (on temporary affiliation up to 30-6-72).
10. Kamla Devi Mahila Mahavidyalaya, Rajnandgaon (on temporary affiliation).
11. Kaylan Arts & Commerce College, Bhilai Nagar (on temporary affiliation up to 30-6-72).
12. Khemraj Lakschmichand Arts, Commerce and Science College, Bagbahra (on temporary affiliation).
13. Law College, Rajnandgaon (on temporary affiliation up to June 14, 1972).
14. Lahiri Degree College, Chirimiri (on temporary affiliation).
15. D.E.S. Law College, Raipur (on temporary affiliation up to June 14, 1972).
16. Mahasamund Mahavidyalaya, Mahasamund (Raipur) (on temporary affiliation up to 30-6-1972).
17. M.E.S. Law College, Bilaspur (on temporary affiliation).
18. Municipal College of Arts and Commerce, Kharsia (on temporary affiliation up to 30-6-1972).

19. Nutan Arts and Commerce College, Dhamtari (on temporary affiliation up to 30-6-1972).
20. N.E.S. Jashpur Degree College, Jashpur Nagar (on temporary affiliation up to 30-6-1972).
21. Seth R.C.S. Law College, Durg (on temporary affiliation up to June 14, 1972).
22. Seth R.C.S. Commerce College, Durg (on temporary affiliation up to 30-6-1972).
23. Pt. Jawahar Lal Nehru Science College, Bemetara (on temporary affiliation).
24. Shrimati Nanibai Goverdhan Degree College, Mungeli (on temporary affiliation).
25. Takhatpur Arts and Science College, Takhatpur (on temporary affiliation).

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

Affiliated Colleges

1. Chhatisgarh College, Raipur (on temporary affiliation up to 30-6-1972).
2. C.M. Dubey Postgraduate College, Bilaspur (on temporary affiliation for M.A. and M.Com. up to 30-6-1972 and up to B.A., B.Com. and B.Sc. on permanent affiliation).
3. Digvijai Mahavidyalaya, Rajnandgaon (on temporary affiliation for M.A. Hindi up to June 30, 1972).
4. Durga Mahavidyalaya Raipur (B.A. B. Com. permanent affiliation, M.A. & M. Com. up to June 30, 1970 and M.A. History and Philosophy up to June 30, 1972).
5. Palu Ram Dhanania Commerce College, Raigarh (on temporary affiliation up to June 30. 1972).
6. S.B.R. College, Bilaspur (on temporary affiliation).

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. Government Ayurvedic College, Raipur.
2. Government Girls' Degree College, Bilaspur (on temporary affiliation up to 30-6-1972).
3. Government Girls' Degree College, Raipur (on temporary affiliation up to 30-6-1972).
4. Pt. J.N.M. Medical College, Raipur (on temporary affiliation up to 30-6-1972).

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

1. Government Arts and Science College, Raigarh (on temporary affiliation up to June 30, 1972).
2. Government College of Engineering & Technology, Raipur.
3. Government D.S.V. Sanskrit Mahavidyalaya, Raipur (B.A. Classics permanent, M.A. Classics and M.A. Sanskrit up to June 30, 1971).
4. Government College of Education, Bilaspur (B.Ed. and M.Ed. permanent and Dip. Ed. on temporary affiliation).
5. Government College of Education, Raipur (B.Ed. and M.Ed. permanent and Dip. Ed. on temporary affiliation).

6. Government Arts and Science College, Durg [B.A. permanent, B. Sc. up to June 30, 1970, M.A. (Economics) M.Sc. Chemistry, Physics, Zoology and Maths up to June 30, 1972].
7. Government Engineering College, Bilaspur (on temporary affiliation up to 30-6-1972).
8. Government Degree College, Jagdalpur (on temporary affiliation up to June 30, 1972).
9. Government College of Science, Raipur (B.Sc. permanent, B.A. up to 30-6-1972. M.Sc., M.A., temporary affiliation).
10. Government Degree College, Ambikopur (B.A., B.Sc., B. Com. on temporary affiliation up to 30-6-71. M.A. Economics up to 30-6-1970).

SARDAR PATEL UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Constituent Colleges

1. Anand Arts College, Anand (on temporary affiliation).
2. Dairy Science College, Anand.
3. H.M. Patel Institute of English, Vallabh Vidyanagar (on temporary affiliation).
4. Law College, Anand (on temporary affiliation).
5. Nalini and Arvind Arts College, Vallabh Vidyanagar.
6. Rajratna P.T. Patel Science College, Vallabh Vidyanagar [permanent affiliation for teaching the courses of studies in Chemistry, Botany, Zoology and Statistics (principal and subsidiary subjects) and Mathematics and Physics (subsidiary subjects) at the B.Sc. examination].
7. The B.J. Vanijya Magavidyalaya (permanent affiliation for Accountancy, Auditing and Banking subjects only).
8. T.V. Patel Arts College, Vallabhvidyanagar (on temporary affiliation up to June, 1971).
9. Vithalbhai Patel Mahavidyalaya (Science College), Vallabh Vidyanagar.

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

Constituent Colleges

1. B.A. College of Agriculture, Anand.
2. Birla Vishvakarma Mahavidyalaya, Vallabh Vidyanagar.

GOVERNMENT COLLEGE

A. COLLEGE TEACHING UP TO BACHELOR'S DEGREE

1. Gujarat College of Veterinary Science and Animal Husbandry, Anand (on temporary affiliation).

SAMBALPUR UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Anchal College, Padampur (Sambalpur).

2. Deogarh College, Deogarh (Sambalpur).
3. D.A.V. College, Titlagarh (Distt. Bolangir).
4. Jawahar Lal College, Patangarh, P.O. Patangarh (Bolangir).
5. Kuchinda College, Kuchinda. P.O. Kuchinda (Sambalpur).
6. Larambha College, Larambha, P.O. Larambha (Sambalpur).
7. Panchayat College, Bargarh (Sambalpur).
8. Rourkela Night College, Rourkela (Sundargarh).
9. Sonepur College, Sonepur (Bolangir).
10. Sushilavati Khoala D.A.V. College for Women, Rourkela-2.

University College

1. Lajpat Rai Law College, Sambalpur.

B. COLLEGE TEACHING UP TO POSTGRADUATE DEGREE

1. University College of Engineering, Burla (Sambalpur).

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. Gangadhar Mehar College (Evening Section), Sambalpur.
2. Government Training College, Sambalpur.
3. Government Training College, Bolangir.
4. Kalahandi College, Bhawanipatna (Kalahandi).
5. Rajendra College, Bolangir.
6. Rourkela Science College, Rourkela (Sundargarh).
7. Sundargarh College, Sundargarh.
8. Women's College, Bolangir.
9. Women's College, Sambalpur.

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

1. Gangadhar Mehar College, Sambalpur.
2. Regional Engineering College, Rourkela (Sundergarh).
3. Veer Surendra Sai Medical College, Burla (Sambalpur).

SAUGAR UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Arts and Commerce College, Chaurai (on temporary affiliation).
2. Arts and Commerce College, Harda (on provisional affiliation).
3. Arts and Commerce College, Baihar (on temporary affiliation).
4. Arts and Commerce College, Khurai (on temporary affiliation).
5. Arts and Commerce College, Junnardeo (on temporary affiliation).
6. Commerce Night College, Sagar (on temporary affiliation).
7. Girls' Degree College, Sagar (on provisional affiliation).
8. Gandhi Memorial Night Degree College, Damoh (on temporary affiliation).
9. Home Science College, Hoshangabad (on provisional affiliation).

10. Jawahar Lal Nehru Memorial Mahavidyalaya, Sohagpur (on provisional affiliation).
11. Jawaharlal Nehru Mahavidyalaya, Deori (on temporary affiliation).
12. Kamla Nehru Mahila Mahavidyalaya, Damoh (on provisional affiliation).
13. Kusum Mahavidyalaya, Seoni, Malwa (on temporary affiliation).
14. Law College, Damoh (on provisional affiliation).
15. Laxman Prasad Tiwari Sanskrit Degree College, Dhana (Sagar) (on temporary affiliation).
16. Mahatma Gandhi Memorial College, Itarsi.
17. Mahatma Gandhi Mahavidyalaya, Kareli (on temporary affiliation).
18. Motilal Nehru Law College, Khandwa (on temporary affiliation).
19. Narmada Mahavidyalaya, Gadarwara (on temporary affiliation).
20. Panch Valley Mahavidyalaya, Parasia (on temporary affiliation).
21. Saifee Golden Jubilee Quaderia Men's College of Science, Burhanpur (on temporary affiliation).
22. Saifee Golden Jubilee Quaderia Women's College of Arts, Science and Home Science, Burhanpur (on temporary affiliation).
23. Satpura Mahavidyalaya for Law, Chhindwara (on temporary affiliation).
24. Sir Hari Singh Gaur Mahavidyalaya, Sagar (on temporary affiliation).
25. Shankar Sao Patel Arts & Commerce College, Warseoni (on temporary affiliation).
26. Swami Vivekanand Mahavidyalaya, Deori Kalan (on temporary affiliation).
27. Shriniwas Rao Telang N.E.S. College, Barman (on provisional affiliation).
28. Thakur Niranjan Singh Mahavidyalaya, Gotegaun (on temporary affiliation).

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

Affiliated Colleges

1. Narmada Mahavidyalaya, Hoshangabad (on provisional affiliation).
2. Seva Sadan Mahavidyalaya, Burhanpur (Ex-Seva Sadan Arts College) (on temporary affiliation).

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. Government Degree College, Piparia (on temporary affiliation up to 1970-71).
2. Government Degree College, Bina (on provisional affiliation).
3. Government Degree College, Narsimhapur.
4. Government Degree College, Seoni.
5. Government Girls' Degree College, Khandwa (on temporary affiliation).
6. Rani Durgavati Government Degree College, Mandla (Ex-Rani Durgavati Mahavidyalaya).

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

1. A.E.C. Training College and Centre, Pachmarhi.

*2. College of Education, Sagar.
3. Government College of Education, Khandwa.
4. J.H. Government Degree College, Betul.
5. M.N.V.K.V. Mahavidyalaya, Chhindwara.
6. Shri Nilkantheshwar Government Postgraduate College, Khandwa.
7. The Jatashankar Trivedi Shakya Mahavidyalaya (Ex-Government Degree College), Balaghat.
8. Government Degree College, Damoh (M.A. in Economics for 5 years, w.e.f. 1966-67 and permanent affiliation in respect of degree classes, w.e.f. 1966-67).

SAURASHTRA UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Gurukul Mahila Arts College, Porbandar (on temporary affiliation up to 14-6-71).
2. Kamani Science and Prataprai Arts College, Amreli (on temporary affiliation up to 14-6-72).
3. Khushaldas Kurji Parekh Commerce College, Amreli (on temporary affiliation up to 1971).
4. Maharaja Shri Mahendrasingji Science College, Morvi (on temporary affiliation).
5. M.B. Arts and Commerce College, Gondal (on temporary affiliation).
6. Madhyamik Shikshan Mahavidyalaya, Bhavnagar (on temporary affiliation).
7. Shrimati Samaratban Virani Arts and Shri Ramjibhai Virani Commerce College, Rajkot (on temporary affiliation up to 14-6-71).
8. Shri Manibhai Virani and Smt. Navalben Virani Science and Smt. Diwaliben Sanghvi and Shri Sankalchandbhai Sanghvi Law College, Rajkot (on temporary affiliation).
9. Sahu Shriyans Prasad Jain Arts and Commerce College, Dharangodhra (on temporary affiliation up to 14-6-71).
10. Sheth Hargovindas Jiwandas Law College, Bhavnagar (on temporary affiliation up to 14th June, 1971).
11. Shri N.K. Mehta Trust Maharshi Dayanand Science College, Porbandar (on temporary affiliation up to 14-6-72).
12. Shree Shardapeeth Arts College, Dwarka (on temporary affiliation up to 14-6-71).
13. Shri Kalyanji Valji Parekh Science College and Matushri Triveniben Kalyanji Parekh Arts College, Mahuva (on temporary affiliation up to 14-6-71).
14. Shree Somnath College, Veraval (on temporary affiliation up to 14th June, 1971).
15. Shri U.N. Mehta Arts College, Morvi (on temporary affiliation up to 14-6-71).
16. Smt. Gulab Ben Jamnadas Sheth Commerce College, Morvi (on temporary affiliation up to 14-6-71).

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*Now a University college.

17. Upleta Municipal Arts and Commerce College, Upleta (on temporary affiliation).

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

Affiliated Colleges

1. Darbar Gopaldas Mahavidyalaya, Aliabada (Jamnagar) (on temporary affiliation up to 14th June, 1972).
2. Kalidas Haridas Madhwani Arts and Commerce College, Porbandar (on temporary affiliation up to 14th June 1972).
3. Matushri Virbaima Mahila College, Rajkot (on temporary affiliation up to 14th June, 1972).
4. M.P. Shah Commerce and Law College, Surendranagar (on temporary affiliation up to 14-6-71).
5. M.P. Shah Municipal College of Commerce and Law, Jamnagar (on temporary affiliation up to 14-6-71).
6. P.D. Malaviya Graduate Teachers College, Rajkot (on temporary affiliation up to 14-6-71).
7. P.D. Malaviya College of Commerce, Rajkot.

GOVERNMENT COLLEGES

A. COLLEGE TEACHING UP TO BACHELOR'S DEGREE

1. Lukhdhiraji Engineering College, Morvi.

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

1. Agriculture College, Junagarh (on temporary affiliation up to 14th June, 1972).
2. Bahauddin College, Junagarh.
3. Dharmendrasinghji Arts and A.M.P. Law College, Rajkot
4. D.K.V. Arts and Science College, Jamnagar.
5. H. & H.B. Kotak Institute of Science, Rajkot.
6. M.J. College of Commerce, Bhavnagar.
7. M.P. Shah Arts and Science College, Surendranagar.
8. M.P. Shah Medical College, Jamnagar.
9. Ramba Graduate Teachers College, Porbandar.
10. Samaldas Arts College, Bhavnagar.
11. Sir P.P. Institute of Science, Bhavnagar.

SHIVAJI UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Acharya Jawadekar Adhyapak Mahavidyalaya, Gargoti (on temporary affiliation).
2. Arts & Commerce, Miroj (on temporary affiliation up to 1972).
3. Arts, Commerce and Science College, Ashta (Sangli) (on temporary affiliation up to June 1972).
4. Arts & Commerce College, Tasgaon (Sangli) (on temporary affiliation up to June 1972).

5. Arts, Science and Commerce College, Ichalkarnaji (on temporary affiliation up to June 1972).
6. Balasaheb Khardekar College, Vengurla (on temporary affiliation up to June 1971).
7. Balwant College, Vita (Sangli) (on temporary affiliation up to June 1972).
8. B.R. Sulakhe Commerce College, Barsi (on temporary affiliation).
9. Chhatrapati Shivaji College, Satara.
10. College of Education, Barsi (affiliation up to June, 1972).
11. Dr. G.N. Datar College of Arts, Science and Commerce, Chiplum (on temporary affiliation up to 1972).
12. Dr. Vaishampayan Memorial Medical College, Sholapur (on temporary affiliation up to June, 1971).
13. Dahiwadi College, Dahiwadi (on temporary affiliation up to June, 1971).
14. Damani Bhairuratan Fatehchand Dayanand College of Arts & Science, Sholapur.
15. Damani Gopabai Bhairuratan Dayanand Evening Law College, Sholapur (on temporary affiliation for three years up to June, 1971).
16. Devchand College, Arjunnagar via Nipani, Kolhapur.
17. G.K. Gokhale College, Kolhapur (on temporary affiliation up to June, 1972).
18. Jaysingpur College, Jaysingpur, Distt. Kolhapur (on temporary affiliation up to June, 1972).
19. Karmaveer Bhaurao Patil College, Urun-Islampur (on temporary affiliation up to June, 1972).
20. Kirti College, Kolhapur (on temporary affiliation up to June, 1972).
21. Law College, Satara (on temporary affiliation).
22. Mudhoji College, Phaltan (on temporary affiliation up to June, 1971).
23. Pandharpur College, Pandharpur (on temporary affiliation up to June, 1972).
24. R.P. Gogate College, Ratnagiri.
25. Sangameshwar College, Sholapur (on temporary affiliation up to June, 1972).
26. Sangli College, Sangli (on temporary affiliation up to June, 1972).
27. Science College, Karad (on temporary affiliation up to June, 1972).
28. Shivraj College of Arts & Commerce, Godhingalaj (on temporary affiliation up to 1972).
29. Sholapur College, Sholapur (on temporary affiliation up to June, 1972).
30. Shivaji Mahavidyalaya, Barsi (on temporary affiliation up to June, 1972).
31. Sindhudurg Mahavidyalaya, Malvan, Distt. Ratnagiri (on temporary affiliation up to June, 1972).
32. S.P.K. Mahavidyalaya, Sawantwadi (on temporary affiliation up to June, 1972).
33. Shri Warana Mahavidyalaya, Warananagar (Kolhapur) (on temporary affiliation up to June, 1972).
34. Vivekanand College, Kolhapur (on temporary affiliation up to June, 1972).
35. Willingdon College, Sangli.
36. Yashwantrao Chavan College, Khatar (on temporary affiliation from June, 1972).

37. Yashwantrao Chavan Mahavidyalaya, Karmala (on temporary affiliation up to June, 1971).

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

Affiliated Colleges

1. Arts and Commerce College, Wai (on temporary affiliation up to June, 1972).
2. Azad College of Education, Satara (on temporary affiliation up to June, 1971).
3. College of Commerce, Kolhapur.
4. College of Education, Sangli (on temporary affiliation up to June, 1971).
5. Chintamanrao College of Commerce, Sangli (on temporary affiliation up to June, 1971).
6. Dayanand College of Education, Sholapur.
7. D.A.V. Velankar College of Commerce, Sholapur.
8. Science College, Satara (on temporary affiliation up to June, 1972).
9. Shahaji Law College, Kolhapur (on temporary affiliation up to June, 1971).
10. S.G.M. College, Karad (on temporary affiliation up to June, 1972).
11. Walchand College of Engineering, Sangli.

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. Government College of Education, Ratnagiri (on temporary affiliation up to June, 1971).
2. Miraj Medical College, Miraj (on temporary affiliation up to June, 1971).
3. Rajaram College, Kolhapur.

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

1. College of Engineering, Karad (on temporary affiliation).
2. S.M.T.T. College, Kolhapur (on temporary affiliation up to June, 1971).

S.N.D.T. WOMEN'S UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Chandanbai Chimanlal, Mahila Arts College, Visnagar (on temporary affiliation).
2. Mahila Mahavidyalaya Sanstha Vasahat, Pratap Road, Raopura, Baroda.
3. Shri Matunga Gujarati Seva Mandal Women's College, 398, Telang Road, Matunga, Bombay-19.
4. Smt. M.M. Shah Mahila College, Surendranagar (Saurashtra) (on temporary affiliation up to 14-6-71).
5. Smt. Bhagiratibai M.R. Mahila Mahavidyalaya, Waehha Gandhi Road, Gandevi, Bombay-7. (on temporary affiliation up to 14th June, 1971).
6. S.L.U. College for Women, Pritamnagar, Pehlo Dhall Sanskar Kendra Marg, Ellis Bridge, Ahmedabad-6.

7. Smt. P.N. Doshi Women's College, Ratan Baug, Cama Lane, Ghatkopar, Bombay-77 (on temporary affiliation up to 14-6-70).
8. Z.F. Wadia Women's College, Athwa Lines, Surat.

B. COLLEGE TEACHING UP TO POSTGRADUATE DEGREE

Affiliated College

1. Smt. N.C. Gandhi Mahila College, Diamond Chowk, Bhavanagar (Saurashtra).

SOUTH GUJARAT UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Jivan Lal M. Shah Arts & Commerce College, Jambusar (on temporary affiliation).
2. Mahanandleshwar Shri Krishnanandji Law College, Broach (on temporary affiliation).
3. Mahanandleshwar Shri Krishnanandji College of Commerce, Broach (on temporary affiliation).
4. Patel Raman Brothers Art College and Science College, Bardoli (Surat) (on temporary affiliation).
5. Shri Jayendrapuri Arts & Science College, Broach (on temporary affiliation).
6. Shri Maharaja Rajendrasinghji College of Arts and Science, Rajpipla (on temporary affiliation up to 14-6-71).
7. Shri J.S. Bhakta & Shri K.M. Bhakta Arts College & Shri A.N. Shah Science College, Kholwad (Surat) (on temporary affiliation up to June, 1971).
8. Shah Khimchandbhai Muljibhai Law College, Tithal Road, P.O. Bulsar (on temporary affiliation).
9. Surat College of Commerce, Surat (on temporary affiliation).
10. Shri Rangshikshan Mahavidyalaya, Bilimora (on temporary affiliation).
11. Vidya Mandir College for Women, Surat (on temporary affiliation).

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

Affiliated Colleges

1. B.P. Baria Science Institute, Navsari (on temporary affiliation).
2. Chuni Lal Gandhi Vidyabhavan, Surat (on temporary affiliation).
3. Navyug College of Arts and Science, Rander Road (Surat) (on temporary affiliation up to 14-6-71).
4. Sarvajanik College of Education, Surat (on temporary affiliation up to 14th June, 1973).
5. P.T. Sarvajanik College of Science, Surat.
6. Shah N.H. Shah Commerce College and J.P. Shroff Arts College, Bulsar (on temporary affiliation up to 14-6-1971).
7. Shri N.K.M. Science College, Tithal Road, P.O. Bulsar (on temporary affiliation up to 14th June, 1971).
8. Sir K.P. College of Commerce, Surat.

9. S.B. Garda Arts College and P.K. Patel College of Commerce, Navsari (on temporary affiliation).
10. The M.T.B. Arts College, Surat.
11. V.S. Patel College of Arts and Science, Bilimora (Surat) (on temporary affiliation).
12. V.T. Choksi Sarvajanik Law College, Surat.

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. Government Medical College, Surat (on temporary affiliation up to 14-6-71).
2. Government Arts and Science College, Daman (on temporary affiliation).
3. Sardar Vallabhbhai Patel Regional College of Engineering and Technology, Surat (on temporary affiliation up to 14th June, 1971).

B. COLLEGE TEACHING UP TO POSTGRADUATE DEGREE

Affiliated College

1. N.M. Agriculture College, Rustom Bag, Lunsikui, Navsari (on temporary affiliation up to June, 1971).

SRI VENKATESWARA UNIVERSITY

NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. B.T. College, Madanapalle.
2. Jawahar Bharati, Kavali.
3. N.B.K.R. Science and Arts College, Vidyanagar, Vakadu (Nellore).
4. Osmania College, Kurnool.
5. Saradamba Dasa Govindiah Setty College, Hindupur (on temporary affiliation).
6. Shri Padmavathi College for Women, Tirupati.
7. Sri Sathya Sai Arts & Science College for Women, Anantapur (on temporary affiliation).
8. Sri Venkateswara Arts College, Tirupati.
9. Sri Venkateswara Oriental College, Tirupati.
10. Sri Venkateswara College for Music and Dance, Tirupati (on temporary affiliation).
11. Sri Vasavi Kanayaka Parmeswari Arts Science and Commerce College, Markopur.
12. The Adoni Arts and Science College, Adoni.
13. V.R. College, Nellore.
14. Visvodaya College, Venkatagiri Town, Nellore Distt. (on temporary affiliation).

University College

1. Sri Venkateswara University College of Engineering, Tirupati.

B. COLLEGE TEACHING UP TO POSTGRADUATE DEGREE

University College

1. Sri Venkateswara University College, Tirupati.

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. Dodla Kousalyamma Government College for Women, Nellore (on temporary affiliation).
2. Government Arts College, Anantapur.
3. Government Arts College, Cuddapah.
4. Government Arts and Science College, Chittoor (on temporary affiliation).
5. Government Engineering College, Anantapur (on temporary affiliation).
6. Government Training College, Kurnool.
7. Government Training College, Nellore.
8. Kasireddy Venkatareddy Government College for Women, Kurnool (on temporary affiliation).
9. P.S. & K.V.S. Government Arts and Science College, Nandyal (on temporary affiliation).
10. P.R.R. & V.S. Government Arts and Science College, Vidavalur.
11. Sri Venkateswara Medical College, Tirupati (on temporary affiliation).
12. S.C.N.R. Government Arts and Science College, Proddatur (on temporary affiliation).
13. S.K.R. Government Arts and Science College, Gudur (on temporary affiliation).
14. Swami Vidyaprakashananda Government Arts and Science College, Kalahasti (on temporary affiliation).
15. Tikkavarapu Rami Reddy Government Arts and Science College, Kandukur (Nellore) (on temporary affiliation).

B. COLLEGE TEACHING UP TO POSTGRADUATE DEGREE

1. Kurnool Medical College, Kurnool.

UDAIPUR UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Associated Colleges

1. B.N. College, Udaipur (Arts and Science).
2. Lokmanya Tilak Teachers' Training College, Dabok (on temporary affiliation).
3. Rajasthan Vidyapeeth Manikya Lal Verma Sharmjivi College, Udaipur, (Arts).

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

Associated Colleges

1. Udaipur School of Social Work, Udaipur (for M.A. in Social Work only).
2. Vidya Bhavan Govind Ram Seksaria Teachers' College, Udaipur (up to M.Ed.).
3. Vidya Bhavan Rural Institute, Udaipur (for M.A. in Rural Sociology only besides B.A. and B.Sc.).

GOVERNMENT COLLEGES

A. COLLEGE TEACHING UP TO BACHELOR'S DEGREE

1. Meera Girls' College, Udaipur (Arts & Science) .

UNIVERSITY OF AGRICULTURAL SCIENCES
BANGALORE
NON-GOVERNMENT COLLEGES

COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

Constituent Colleges

1. Agricultural College, Dharwar.
2. Agricultural College, Hebbal (Bangalore).
3. Fisheries College, Mangalore.
4. Veterinary College, Hebbal, Bangalore.

UTKAL UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Atal Behari College, Basudevapur (Balasore).
2. Anandpur College, Anandpur (Keonjhar).
3. Banki College, Banki (Cuttack).
4. Bhadrak College, Bhadrak (Balasore).
5. Christ College, Cuttack.
6. Dina Krushna College, North Balasore (Balasore).
7. Godavarish Mahavidyalaya, Banpur (Puri).
8. Gopabandhu Science College, Athagarh (Cuttack).
9. Gopabandhu Choudhry College, Rama Chandrapur (Cuttack).
10. Karanjia College, Karanjia, P.O. Karanjia (Mayurbhanj).
11. Kendrapara College, Kendrapara (Cuttack).
12. Khurda College, Khurda (Puri).
13. Mohan Subudhi College, Baramba, P.O. Baramba (Cuttack).
14. Nayagarh College, Nayagarh (Puri).
15. Nimapara College, Nimapara, P.O. Nimapara (Puri).
16. Khetrabasi College, Nirakarpur, Puri.
17. Rairangpur College, Rairangpur, P.O. Rairangpur (Mayurbhanj).
18. Salipur College, P.O. Salipur (Cuttack).
19. Swami Vivekanand Memorial College, Jagat Singhpur (Cuttack).
20. Stewart Science College, Cuttack.
21. Udala College, Udala, P.O. Udala (Mayurbhanj).
22. Upendranath College, Soro, P.O. Soro (Balasore).
23. Vyasanagar College, At. & P.O. Jajpur Road (Cuttack).

University Colleges

1. Evening College of the University in the Buxi Jagabandhu Bidyadhar College, Bhubaneswar (Puri).
2. Madhusudan Law College, Cuttack.

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. Angul College, Angul (Dhenkanal).
2. Buxi Jagabandhu Bidyadhar College, Bhubaneswar (Puri).
3. Dhenkanal College, Dhenkanal.
4. Evening Shift in M.P.C. College, Baripada (Mayurbhanj).
5. Evening College in Ravenshaw College, Cuttack-3.
6. Fakir Mohan College (Evening Shift), Balasore.
7. Fakir Mohan College, Balasore.
8. Government Training College, Angul (Dhenkanal).
9. Keonjhar College, Keonjhar.
10. Maharaja Purna Chandra College, P.O. Baripada (Mayurbhanj).
11. Mahila College, Puri.
12. Narasingh Chaudhury College, Jajpur (Cuttack).
13. Ramadevi Women's College, Bhubaneswar (Puri).
14. Regional College of Education, Bhubaneswar (Puri).
15. Samanta Chandra Sekhar College, Puri, Post & Distt. Puri.
16. Shailabala Women's College, Cuttack.
17. Women's College, Balasore.

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

1. Radhanath Training College, Cuttack-2.
2. Ravenshaw College, Cuttack-3.
3. Sri Ram Chandra Bhanja Medical College, Cuttack-7.

U. P. AGRICULTURAL UNIVERSITY
NON-GOVERNMENT COLLEGES

COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

Constituent Colleges

1. College of Agriculture, Pantnagar.
2. College of Veterinary Medicine, Pantnagar.
3. Pant College of Technology, Pantnagar.

VIKRAM UNIVERSITY
NON-GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

Affiliated Colleges

1. Biora Degree College, Biora (on temporary affiliation).
2. Gyan Mandir College, Neemuch (on provisional affiliation).
3. Jawahar Lal Nehru Vidhi Mahavidyalaya, Mandsaur (on provisional affiliation).
4. K.G.S. Law College, Agar (on temporary affiliation).
5. Lokmanya Tilak Science College, Ujjain (on temporary affiliation).
6. Lal Bahadur Shastri College, Seronj (on temporary affiliation).
7. Mahidpur Mahavidyalaya, Mahidpur (on temporary affiliation).
8. Model Science College, Ujjain (on temporary affiliation).

9. Mahatma Gandhi Smarti Mahavidyalaya, Barnagar (on temporary affiliation).
10. Naveen Law College, Shajapur (on provisional affiliation).
11. Nagar Palika College, Ratlam (on provisional affiliation).
12. Nehru Memorial Degree College, Sendhwa (on provisional affiliation).
13. Ravindra College, South T.T. Nagar, Bhopal (on temporary affiliation).
14. Samrat Ashok Technological Institute, Vidisha (on provisional affiliation).
15. Shri Dhauvantri Ayurvedic, Chikitsa Mahavidyalaya, Ujjain (on temporary affiliation).
16. Shri Harak Chand Chouradiya College, Bhampur (on temporary affiliation).
17. Vikram Degree College, Khachrand (on temporary affiliation).

University College

1. Madhav Science College, Ujjain.

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

Affiliated Colleges

1. Jawahar Lal Nehru College, Barwaha (on provisional affiliation).
2. Jawahar Lal Nehru Smarti Mahavidyalaya, Shujalpur (on provisional affiliation).
3. Lal Bahadur Shastri College, Ganj Basoda (on temporary affiliation).
4. Madhav College, Ujjain.
5. S.S.L. Jain College, Vidisha.
6. Saifia College, Bhopal (on provisional affiliation).
7. Sandipani Mahavidyalaya, Ujjain (on temporary affiliation).
8. Shri Nehru Mahavidyalaya, Agar (on temporary affiliation).

GOVERNMENT COLLEGES

A. COLLEGES TEACHING UP TO BACHELOR'S DEGREE

1. Government Engineering College, Ujjain (on temporary affiliation).
2. Government College of Education, Dewas.

B. COLLEGES TEACHING UP TO POSTGRADUATE DEGREE

1. Bal Krishna Sharma Naveen Government College, Shajapur.
2. Government College, Barwani.
3. Gandhi Medical College, Bhopal.
4. Government College, Dhar.
5. Government College, Jaora.
6. Government College, Khargone.
7. Government College, Jhabua.
8. Government College, Mandsaur.
9. Government College, Narsinghgarh.
10. Government College, Neemuch.
11. Government College, Rajgarh.
12. Government College, Ratlam.
13. Government College, Rampura.
14. Government College, Sehore.
15. Government Girls' College, Ujjain.

16. Government Hamidia Arts and Commerce College, Bhopal.
17. Government College of Education, Bhopal.
18. Government College of Education, Ujjain.
19. Government College, Bareili (Raisen) (on temporary affiliation).
20. Government College, Ganj Basoda (on temporary affiliation).
21. K.P. College, Dewas.
22. Maharani Laxmibai Girls' College, Bhopal.
23. Maulana Azad College of Technology, Bhopal.
24. Motilal Vigyan Mahavidyalaya, Bhopal.
25. Regional College of Education, Bhopal.

GURUKUL KANGRI VISHWAVIDYALAYA*
NON-GOVERNMENT COLLEGES

COLLEGE TEACHING UP TO BACHELOR'S DEGREE

Constituent College

1. Kanya Gurukul Mahavidyalaya, Dehra Dun. Smt. Damayanti Kapoor.

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*Institution deemed to be University under Section 3 of the UGC Act, 1956.

APPENDIX D

UGC Centres of Advanced Study

The information in this appendix is based on *Centres of Advanced Study in Indian Universities*, New Delhi, University Grants Commission, 1967, and a February, 1969, list published by the U.S. Educational Foundation in India.

University	Department Recognized as Centre of Advanced Study	Major Field of Specialization
I. SCIENCES		
1. Annamalai	Marine Biology	Marine Biology
2. Bombay	Mathematics	Pure Mathematics
	Chemical Technology	Applied Chemistry
3. Calcutta	Mathematics	Applied Mathematics
	Radiophysics and Electronics	Radiophysics and Electronics
4. Delhi	Physics	Theoretical Physics
	Chemistry	Chemistry of Natural Products
	Botany	Plant Morphology and Embryology
	Zoology	Cell Biology and Endocrinology
5. Indian Institute of Science, Bangalore	Bio-Chemistry	Proteins, Lipids and Vitamins
6. Madras	Physics	Crystallography and Biophysics
	Botany	Plant Pathology and Mycology
	Mathematics	Pure Mathematics
7. Osmania	Astronomy	Astronomy
8. Panjab	Geology	Himalayan Geology and Palaeontology
	Mathematics	Pure Mathematics
9. Saugor	Geology	Structural Geology and Geomorphology
II. SOCIAL SCIENCES AND HUMANITIES		
1. Aligarh	History	Medieval Indian History
2. Annamalai	Linguistics	Dravidian Linguistics
3. Baroda	Education	Education
4. Banaras	Philosophy	Indian Philosophy
5. Bombay	Economics	Public Finance and Industrial Economics
6. Calcutta	Ancient Indian History and Culture	Ancient Indian History and Culture

7. Delhi	Economics	Economic Development and Economic History
	Sociology	Sociology
8. Madras	Philosophy	Advaita and Allied Systems of Philosophy
9. Poona	Economics (Gokhale Institute)	Agricultural Economics
	Linguistics (Deccan College)	Applied Linguistics
	Sanskrit	Sanskrit Literature
10. Visva-Bharati	Philosophy	Metaphysics

APPENDIX E

Research Institutions

The information and data in the appendix are based on the *Directory of Institutions for Higher Education* 1967, Ministry of Education, Government of India. This appendix has been designed especially for use with the Admission and Placement Recommendations in Chapter IX.

For further information on these institutions, see Chapter VI.

1. Scientific Research Institutions

Andhra

1. Nutrition Research Laboratories, Hyderabad-7: *f.* 1918; *Mgt.* Indian Council of Medical Research: *Courses* M.Sc. (Osmania Univ.), Ph.D. (Andhra, Banaras, Baroda, Bombay, Gauhati, Karnatak, Madras, Magadh, Mysore, Nagpur, Osmnia and Poona Universities). D.Sc. (Madras, Mysore).

Assam

1. Pasteur Institute and Medical Research Institute, Shillong: *f.* 1917; *Mgt.* Govt.
2. Tocklai Experimental Station, Cinnamara: *f.* 1911; *Mgt.* India Tea Association.

Gujarat

1. Ahmedabad Textile Industry's Research Association, Naurangpura, Ahmedabad-9: *f.* 1947; *Mgt.* Private; *Courses* M.Sc., M.Sc. (Tech.) (Bombay Univ.) and Ph.D. (Chem. and Phys.) (Baroda, Bombay and Gujarat Universities).
2. Central Salt & Marine Chemicals Research Institute, Bhavnagar: *f.* 1954; *Mat.* Council of Scientific & Industrial Research: *Course* Ph.D. Andhra, Banaras, Baroda, Bombay, Gujarat, Karnatak, Punjab, Rajasthan, S.V. Vidyapeeth and Shivaji Universities).
3. K.M. School of Post-Graduate Medicine and Research, Ahmedabad: *f.* 1931; *Mgt.* Municipal Corporation; *Courses* D.A., D.G.O., D.V.D., D.L.O., Dip. in Autology, Paediatrics, Medical Radiology & Electrology.
4. Physical Research Laboratory, Ahmedabad-9: *f.* 1948; *Mgt.* Private: *Courses* M.Sc. (Phys.). Ph.D. (Agra, Baroda, Gujarat, Kerala and Karnatak Universities).

Haryana

1. National Dairy Research Institute, Karnal: *f.* 1955; *Mgt.* Central Govt.; *Courses* Ph.D. (Dairy Chem., Dairy Husbandry, Dairy Microbiology and Dairy Tech.) (Agra, Bombay, Madras, Poona and Panjab Universities).

Madras

1. Astrophysical Observatory (Indian Meteorological Department), Kodaikanal: *f.* 1898; *Mgt.* Central Govt.; *Course* Ph.D. (Agra, Andhra, Karnataka, Kerala, Madras, Punjab, Poona and Utkal Universities).
2. Central Electro-Chemical Research Institute, Alagappa College, P.O., Karaikudi: *f.* 1953; *Mgt.* Council of Scientific & Industrial Research; *Course* Ph.D. (Agra, Aligarh, Andhra, Banaras, Bombay, Karnatak, Kerala, Madras, Panjab, Rajasthan, Sri Venkateswara and Vikram Universities).

3. Central Leather Research Institute, Adyar, Madras-20: *f.* 1953; *Mgt.* Council of Scientific & Industrial Research; *Courses* Ph.D. (Bombay, Karnatak, Kerala, Madras, Nagpur, Panjab and Poona Universities), D.Sc. (Andhra Univ.), D.Phil. (Calcutta Univ.).
4. Central Marine Fisheries Research Station, Mandapam Camp: *f.* 1947; *Mgt.* Central Govt.; *Course* Ph.D. (Aligarh, Andhra, Banaras, Bombay, Kerala, Panjab and Rajasthan Universities).
5. Sugarcane Breeding Institute, Coimbatore-7: *f.* 1912; *Mgt.* Central Govt.; *Course* Ph.D (Madras and Panjab Univ.).

Maharashtra

1. Armed Forces Medical College, Poona: *f.* 1948; *Mgt.* Central Govt. *Course* M.D., M.S., D.P.H., D.C.P., D.A. & Ph.D. (Poona Univ.).
2 Haffkin Institute, Parel, Bombay-12: *f.* 1899; *Mgt.* Govt.; *Courses* M.Sc. (Applied Bio., Bio-Chem., Microbiology and Zo.), M.Sc. (Med.) (Baroda, Bombay, Gujarat, Poona and Sardar Patel Universities), Ph.D. (Bombay Univ.).
3. Indian Cancer Research Centre, Parel, Bombay: *f.* 1952; *Mat.* Private; *Courses* M.Sc. (Bio. Chem., Microbiology, Organic Chem., Phys. and Zo.), Ph.D. (Sc.).
4. Maharashtra Association for Cultivation of Science, Poona: *f.* 1946; *Mgt.* Private; *Courses* M.Sc. (Bot., Microbiology and Zo.), and Ph.D. (Poona).
5. Taraporwala Marine Biological Research Station, Netaji Subhash Road, Bombay: *f.* 1951; *Mgt* Govt.; *Courses* M.Sc., Ph.D.
6. Tata Memorial Hospital, Hospital Avenue, Parel, Bombay-12: *f.* 1962; *Mgt.* Private; *Courses* M.D., M.S., D.A., D.M.R.E. (Bombay).

Mysore

1. National Dairy Research Institute, Adugodi Post, Bangalore: *f.* 1923; *Mgt.* Central Govt.; *Courses* M.Sc., Ph.D. (Bombay, Gujarat and Poona Universities).

Rajasthan

1. Central Electronics Engineering Research Institute, Pilani: *f.* 1956; *Mgt.* Council of Scientific & Industrial Research; *Course* Ph.D.

Uttar Pradesh

1. Birbal Sahni Institute of Palaeobotany, Lucknow-7: *f.* 1946; *Mgt.* Private; *Courses* Ph.D. (Aligarh, Banaras and Lucknow Universities), D.Sc. (Andhra Univ.).
2. Central Building Research Institute, Roorkee: *f.* 1947; *Mgt.* Council of Scientific & Industrial Research; *Course* Ph.D. (Agra and Banaras Universities).
3. Central Drugs Research Institute, Lucknow: *f.* 1949; *Mgt.* Council of Scientific & Industrial Research; *Course* Ph.D. (Agra, Aligarh, Andhra, Banaras, Baroda, Bombay, Calcutta, Madras, Panjab, Poona, Karnatak, Kurukshetra, Lucknow and Rajasthan Universities).
4. Forest Research Institute, Dehra Dun: *f.* 1906; *Mgt.* Central Govt.; *Courses* Ph.D. (Agra, Aligarh, Annamalai, Banaras, Baroda, Calcutta, Kerala, Madras, Mysore, Panjab and Poona Universities), D.Sc. (Agra, Aligarh, Andhra, Madras, Panjab, Patna and Rajasthan Universities).

5. HARCOURT BUTLER TECHNOLOGICAL INSTITUTE, KANPUR: *f.* 1921; *Mgt.* Govt.; *Course* Ph.D. (Agra Univ).
6. INDIAN INSTITUTE OF SUGARCANE RESEARCH, LUCKNOW: *f.* 1954; *Mgt.* Central Govt.
7. INDIAN VETERINARY RESEARCH INSTITUTE, IZATNAGAR: *f.* 1958; *Mgt.* Central Govt.; *Courses* M.V.Sc., Ph.D. (Agra Univ.).
8. INDIAN VETERINARY RESEARCH INSTITUTE, MUKTESHWAR: *f.* 1922; *Mgt.* Central Govt.; *Courses* National Dip. in Prev. Vet. Med., M.B.Sc., Ph.D.
9. NATIONAL SUGAR INSTITUTE, KANPUR: *f.* 1936; *Mgt.* Central Govt.; *Course* Ph.D. (Agra, Andhra, Annamalai, Banaras, Calcutta, Kerala, Madras, Panjab, Poona and Saugar Universities).
10. SHEILA DHAR INSTITUTE OF SOIL SCIENCE, UNIVERSITY OF ALLAHABAD, ALLAHABAD: *f.* 1949; *Mgt.* University; *Courses* D. Phil and D.Sc. in Chemistry.

West Bengal

1. ALL INDIA INSTITUTE OF HYGIENE & PUBLIC HEALTH, CALCUTTA: *f.* 1932; *Mgt.* Central Govt.; *Courses* D.Sc. (P.H.), D.Phil. (Med.) (Calcutta Univ.).
2. BENGAL IMMUNITY RESEARCH INSTITUTE, 39, ACHARYA JAGDISH BOSE ROAD, CALCUTTA-16: *f.* 1935; *Mgt.* Private; *Courses* M, Pharm, Ph.D. (Panjab Univ.), D.Phil. (Calcutta Univ.).
3. BOSE INSTITUTE, 93/1, ACHARYA PRAFULLA CHANDRA ROAD, CALCUTTA-9: *f.* 1917; *Mgt.* Private; *Courses* D.Sc., D.Phil. (Calcutta Univ.).
4. CENTRAL DRUGS LABORATORY, 3, KYD STREET, CALCUTTA: *f.* 1937; *Mgt.* Central Govt.
5. CENTRAL INLAND FISHERIES RESEARCH INSTITUTE, BARRACKPORE: *f.* 1947; *Mgt.* Central Govt.; *Courses* M.Sc. (Zo.), Ph.D., D.Phil., D.Sc.
6. INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE, JADAVPUR (CALCUTTA): *f.* 1876; *Mgt.* Private *Courses* Ph.D., D.Phil.
7. INDIAN INSTITUTE OF TECHNOLOGY, KHARAGPUR: *f.* 1951; *Mgt.* Board of Governors; *Courses* Ph.D., D.Sc.
8. INDIAN STATISTICAL INSTITUTE, CALCUTTA: *f.* 1932; *Mgt.* Autonomous; *Courses* Ph.D., D.Sc.
9. INSTITUTE OF POST-GRADUATE MEDICAL EDUCATION AND RESEARCH, 244, LOWER CIRCULAR ROAD, CALCUTTA: *f.* 1957; *Mgt.* Govt.; *Courses* M.D. M.S., M.O., D.Phil. (Med. in Pathology) (Calcutta Univ.).

Delhi

1. ALL INDIA INSTITUTE OF MEDICAL SCIENCES, SAFDARJANG, NEW DELHI: *f.* 1956; *Mgt.* Autonomous.
2. INDIAN AGRICULTURAL RESEARCH INSTITUTE, NEW DELHI: *f.* 1958; *Mgt.* Govt.; *Courses* M.Sc., Ph.D.
3. INSTITUTE OF AGRICULTURAL RESEARCH STATISTICS, LIBRARY AVENUE, NEW DELHI: *f.* 1945; *Mgt.* Indian Council of Agricultural Research Institute; *Courses* M.Sc., Ph.D.
4. NATIONAL PHYSICAL LABORATORY, HILLSIDE ROAD, NEW DELHI: *f.* 1949; *Mgt.* Council of Scientific & Industrial Research; *Courses* M.Sc. (Punjab and Madras Universities), Ph.D. (Agra, Andhra, Banaras, Baroda, Bombay, Delhi, Karnatak, Kerala, Madras, Nagpur and Panjab Universities).

5. School of Planning & Architecture, New Delhi-1: *f.* 1955; *Mgt.* Autonomous.

Himachal Pradesh

1. Central Research Institute, Kasauli: *f.* 1906; *Mgt.* Central Govt.; *Courses* M.Sc. (Bombay and Panjab Universities), Ph.D. (Aligarh, Kerala, Madras, Mysore, Nagpur, Panjab and Patna Universities), M.D. (Andhra, Panjab and Patna Universities), D.Sc. (Andhra and Nagpur Universities).

2. Humanistic Research Institutions

Andhra Pradesh

1. Central Institute of English, Hyderabad-7: *f.* 1958; *Mgt.* Board of Governors; *Course* Post-Graduate Dip. in Teaching of English.
2. The Indian Institute of Economics, Himayatnagar, Hyderabad-29: *f.* 1961; *Mgt.* Govt.; *Course* Ph.D. (Osmania and Mysore Universities).

Assam

1. Assam State Museum, Gauhati: *Mgt.* Govt.
2. Department of Historical & Antiquarian Studies, Gauhati: *f.* 1928; *Mgt.* Govt.; *Course* Research.

Bihar

1. Institute of Post-Graduate Studies and Research in Arabic and Persian Learning, P.O. Mahendru, Patna-6: *f.* 1955; *Mgt.* Govt.; *Course* Kamil (Govt.), Ph.D. and D.Litt. (Patna University).
2. Research Institute of Prayrit, Jainology and Ahimsa, Muzaffarpur: *f.* 1955; *Mgt.* Govt.; *Courses* B.Sc., M.A., Ph.D., D. Litt. (Bihar Univ.).

Gujarat

1. B.M. Instithte, Ashram Road, Ahmedabad-9: *f.* 1964; *Mgt.* Private; *Course* Ph.D. (Gujarat Univ.).
2. Chunilal Gandhi Vidyabhavan, College Campus, Nehru Road, Surat-1: *f.* 1961; *Mgt.* Private; *Courses* M.A. (Gujarati) and Ph.D. (Gujarat Univ.).
3. L.D. Bhartiya Sanskrit Vidyamandir, Ahmedabad: *f.* 1963; *Mgt.* Private; *Course* Ph.D. (Prakrit).
4. Sheth B.J. Institute of Learning and Research, Ahmedabad: *f.* 1939; *Mgt.* Private; *Course* Ph.D. (Ancient Indian Culture, Gujarati and Skt.) (Gujarat Univ.).
5. Shri Dwarkadhish Sanskrit Academy & Indological Research Institute, Dwarka: *f.* 1961; *Mgt.* Private; *Course* Ph.D. (Indology) (Gujarat Univ.).

Maharashtra

1. All India Institute of Local Self Government, 11, Horniman Circle, Fort, Bombay-1: *f.* 1964; *Mgt.* Private; *Course* Ph.D. Arts (Bombay Univ.).
2. Anjuman-i-Islam Urdu Research Institute, 92, Dr. Dadabhoy Naoroji Road, Bombay-1: *f.* 1947; *Mgt.* Private; *Courses* M.A., Ph.D. (Bombay Univ.).
3. Bhandarkar Oriental Research Institute, Poona-4: *f.* 1917; *Mgt.*

Private; *Courses* M.A. (Ancient Indian Culture and Skt.) and Ph.D. (Poona Univ.).

4. Bharata Itihasa Samshodhaka Mandala, Poona: *f.* 1910; *Mgt.* Private; *Course* Ph.D. (Maratha Hist.) (Poona University).
5. Bharatiya Vidya Bhavan, Chaupatty Road, Bombay-7: *f.* 1939; *Mgt.* Private; *Courses* M.A. and Ph.D. (Gujarati and Ardhamagadhi) (Bombay Univ.).
6. Bombay Natural History Society, Hornbill House, Opposite Lion Gate, Apollo Street, Bombay-1: *f.* 1883; *Mgt.* Private; *Course* M.Sc. (Zo.).
7. Deccan College Post-Graduate & Research Institute, Poona-6: *f.* 1939; *Mgt.* Private; *Courses* M.A., Ph.Dd. (Poona Univ.), Dip. in Linguistics (Maharashtra Govt.).
8. Demographic Training and Research Centre, Chembur, Bombay-71: *f.* 1956; *Mgt.* Central Govt.; *Course* Ph.D. (Bombay Univ.).
9. G.K. Institute of Rural Education, Gargoti (Disst. Kolhapur): *f.* 1952; *Mgt.* Private; *Courses* M.Ed., Ph.D. (Poona Univ.).
10. Gokhale Institute of Politics & Economics, Poona-4: *f.* 1930; *Mgt.* Private; *Course* Ph.D. (Poona).
11. Indian Institute of Education, Prabhu Niketan, 16th Road, Chembur, Bombay-71: *f.* 1948; *Mgt.* Private; *Courses* M.Ed., Ph.D. (Bombay Univ.).
12. Marathi Sanshodhan Mandal, 172, Naigaon Cross Road, Dadar, Bombay-14: *f.* 1948; *Mgt.* Private; *Course* Ph.D. (Bombay Univ.).
13. Tata Institute of Social Sciences, Sion, Trombay Road, Chembur, Bombay-71: *f.* 1936; *Mgt.* Private; *Course* Dips. in Social Service, Ph.D. (Arts).

Delhi

1. Archaeological Survey of India, School of Archaeology, New Delhi: *f.* 1885; *Mgt.* Central Govt.; *Course* Dip. in Archaelogy.
2. Indian School of Public Administration, Indraprastha Estate, New Delhi: *f.* 1958; *Mgt.* Private; *Course* Master's Dip in Public Administration.
3. Central Institute of Education, 33, Chhatra Marg. Delhi-7: *f.* 1947; *Mgt.* N.C.E. R.T.; *Courses* B.Ed., M.Ed. and Ph.D. (Delhi University)

APPENDIX F

Institutions with Non-Affiliated Courses

The source of the information in this appendix is the *Directory of Institutions for Higher Education* 1967, Ministry of Education, Government of India. These are institutions offering post-matriculation (post-secondary) courses of at least two years in duration.

While the vast majority of these institutions are not affiliated with universities, this appendix does include institutions which, though affiliated with universities, also conduct courses that are under the purview of authorities other than the affiliating universities. For further information, see Chapter VI.

1. Agriculture, Dairying and Marine Products Study

Maharashtra

1. Institute of Dairy Technology, Aarey, Colony Bombay-65: *f.* 1960; *Mgt.* Govt.; *Course* Dip. in Dairying.

Mysore

1. Marine Products Processing Training Centre, Mangalore: *f.* 1963; *Mgt.* Govt.; *Course* Dip. in Processing of Marine & Agri. Training.
2. National Dairy Research Institute, Bangalore: *f.* 1923; *Mgt.* Central Govt.; *Course* Indian Dairy Diploma.

Uttar Pradesh

1. Agriculture School, Gurukul University, Kangri: *f.* 1955; *Mgt.* Private; *Course* Agri. & Extension Dip. Exam.
2. Agriculture School, Rajput Shiksha, Dhaulana (Meerut): *f.* 1959; *Mgt.* Private; *Course* Agri. & Extension Dip. Exam.
3. F.N.E. Agricultural School-*cum*-Extension Training Centre, Rajghat, Varanasi: *f.* 1955; *Mgt.* Private; *Course* Agri. & Extension Dip. Exam.
4. Government Agricultural Institute, Bulandshahr: *f.* 1921; *Mgt.* Govt.; *Course* Agri. & Extension Dip. Exam.
5. Government Agricultural School, Chirgaon (Jhansi): *f.* 1948; *Mgt.* Govt.; *Course* Agri. & Extension Dip. Exam.
6. K.M. Munshi Land Institute, Sarojini Nagar, Lucknow: *f.* 1956; *Mgt.* Private; *Courses* Agri. & Extension Dip. Exam. Rural Services Course.
7. Rajkiya Krishi Vidyalaya, Gorakhpur: *f.* 1931; *Mgt.* Govt.; *Course* Agri. & Extension Dip. Exam.
8. Rural Agricultural School, Bisawar (Mathura): *f.* 1959; *Mgt.* Private; *Course* Agri. & Extension Dip. Exam.

2. Banking Commerce, Co-operation, Secretarial Practice and Library Science

Andhra Pradesh

1. Anwar-ul-Uloom Dip. College of Commerce, New Mallapalli, Hyderabad: *f.* 1953; *Mgt.* Private; *Courses* Dips. in Banking and Commerce.
2. Government Polytechnic for Girls, Kakinada: *f.* 1961; *Mgt.* Govt.; *Course* Dip. in Secretarial Practice.
3. Government Polytechnic, Hyderabad: *f.* 1954; *Mgt.* Govt.; *Courses* in Banking and Commerce.

4. KAMALA NEHRU GIRL'S POLYTECHNIC, HYDERABAD: *f.* 1961; *Mgt.* Private; *Course* Dip. in Commercial Practice.

Assam

1. GIRL'S POLYTECHNIC, GAUHATI: *f.* 1964; *Mgt.* Govt.; *Course* Dip. in Stenography.

Bihar

1. COLLEGE OF COMMERCE, PATNA: *f.* 1955; *Mgt.* Private; *Courses* Cert. and National Dip. in Commerce.

Gujarat

1. GOVERNMENT POLYTECHNIC FOR GIRLS, AHMEDABAD: *f.* 1964; *Mgt.* Govt.; *Courses* Dips. in Secretarial Practice, Business Correspondence & Stenography.
2. GOVERNMENT POLYTECHNIC FOR GIRLS, SURAT: *f.* 1965; *Mgt.* Govt.; *Courses* Dips. in Secretarial Practice, Business Correspondence & Stenography.

Kerala

1. CALICUT CO-OPERATIVE COLLEGE, CALICUT: *f.* 1962; *Mgt.* Private; *Course* National Dip. in Commerce.
2. CO-OPERATIVE COLLEGE, TRICHUR: *f.* 1962; *Mgt.* Private; *Course* National Dip. in Commerce.
3. CO-OPERATIVE COLLEGE, TRIVANDRUM: *f.* 1949; *Mgt.* Private; *Courses* National Dip. in Commerce, Higher Dip. in Co-operation and Company Secretary's exam.
4. FATIMA MATA NATIONAL COLLEGE, QUILON: *f.* 1951; *Mgt.* Private; *Course* National Dip. in Commerce.
5. N.S.S. CO-OPERATIVE COLLEGE, PANDALAM: *f.* 1962; *Mgt.* Private; *Course* National Dip. in Commerce.
6. SANATAN DHARAM COLLEGE, ALLEPEY: *f.* 1946; *Mgt.* Private; *Course* National Dip. in Commerce.
7. SREE NARAYANA COLLEGE, QUILON:*f.* 1962; *Mgt.* Private; *Course* National Dip. in Commerce.
8. ST. THERESA'S COLLEGE, ERNAKULAM: *f.* 1959; *Mgt.* Private; *Course* National Dip. in Commerce.
9. *WOMEN'S POLYTECHNIC, TRIVANDRUM: *f.* 1961; *Mgt.* Govt.; *Course* Dip. in Shorthand and Typewriting.

Madras

1. INSTITUTE OF CATERING TECHNOLOGY AND APPLIED NUTRITION, MADRAS-20: *f.* 1963; *Mgt.* Central Govt.; *Courses* Dips. in Hotel Management and Catering Tech., Craft courses in Bakery, Confectionery, Cookery, Restaurant and Counter Service, Hotel Reception and Bookkeeping, Elementary Management and Housewives' Cert.
2. INSTITUTE OF COMMERCIAL PRACTICE, MADRAS: *f.* 1965; *Mgt.* Govt.; *Course* Dip. in Commercial Practice.
3. P.S.G. POLYTECHNIC, COIMBATORE: *f.* 1939; *Mgt.* Private; *Course* Dip. in Commerce.

Maharashtra

1. CO-OPERATIVE TRAINING CENTRE, 43/164, GUNA ROAD, KARVE ROAD, POONA-4: *f.* 1962; *Mgt.* Private; *Course* Higher Dip. in Co-operation.

2. National Co-operative College & Research Institute, 5-B.J. Road, Poona-1: *f.* 1947; *Mgt.* Private; *Courses* Senior Officers' Training Course, Special Course in Cooperative Marketing (Short-term), Dip. in Co-op.
3. Sydenham College of Commerce and Economics, Bombay: *f.* 1913; *Mgt.* Govt.; *Courses* Dips. in Accountancy and Secretarial Practice.

Mysore

1. Polytechnic for Women, Bangalore: *f.* 1961; *Mgt.* Govt.; *Courses* Dips. in Secretarial Practice and Lib. Sc.
2. Polytechnic for Women, Hubli: *f.* 1963; *Mgt.* Govt.; *Courses* Dips. in Secretarial Practice and Lib. Sc.

Punjab

1. Govt. Polytechnic for Women, Chandigarh: *f.* 1962; *Mgt.* Govt.; *Courses* Dips. in Stenography and Secretarial Practice.

Uttar Pradesh

1. B.V. Rural Institute, Bichpuri, Agra: *f.* 1956; *Mgt.* Private; *Course* P.G. Dip. in Rural Economics and Cooperation.

West Bengal

1. Co-operative Training Centre, Kalyani (Nadia): *f.* 1964; *Mgt.* Private; *Course* General Basic Course in Cooperation.
2. Goenka College of Commerce and Business Administration, 210 Bipin Behari Ganguli Street, Calcutta-12: *f.* 1905; *Mgt.* Govt.; *Course* National Dip. in Commerce.
3. Indian Institute of Management, Emerald Bower, 56, A.B.T. Road, Calcutta-50: *f.* 1964; *Mgt.* Govt.; *Courses* P.G. Programme in Management, Junior Executive.

Delhi

1. Delhi Polytechnic, Delhi: *f.* 1941; *Mgt.* Central Govt.; *Course* National Dip. in Commerce.
2. Women's Polytechnic, New Delhi: *f.* 1962; *Mgt.* Delhi Admn.; *Courses* Dips. in Library Science and Secretarial Practice.

3. Domestic Science

Andhra Pradesh

1. Domestic Science Training College, Secunderabad: *f.* 1951; *Mgt.* Govt.; *Course* Dip. in Domestic Sc.
2. Girls' Vocational Institute, Hyderabad (Dn.): *f.* 1955; *Mgt.* Govt.; *Course* Cert. in Domestic Sc.
3. Girls' Vocational Institute, Warangal: *f.* 1955; *Mgt.* Govt.; *Course* Cert. in Domestic Sc.

Maharashtra

1. Girl's Vocational Institute, Aurangabad: *f.* 1955; *Mgt.* Govt..; *Courses* Cert. in Domestic Sc.
2. Gulistan Finishing School & Domestic Institution, Bharat Bhavan, 91, Walkeshwar Road, Bombay-6: *f.* 1955; *Mgt.* Private; *Course;* Cert. in Home Sc.
3. Maharani Vijaimala Chatrapati Grahini Mahavidyalaya, Old Place, Kolhapur: *f.* 1955; *Mgt.* Private; *Course* Dip. in Home Sc.

4. Nirmala Niketan Home Science Institute, 38, New Marine Lines, Bombay: *f.* 1955, *Mgt.* Private; *Course* Dip. in Home Sc., T.T. Dip. in Home Making, T.D., Extension classes.

Mysore

1. Central Institute of Home Science, Bangalore: *f.* 1962; *Mgt.* Govt.; *Course* Dip. in Home Sc.
2. Govt. Training College for Women, Mysore: *f.* 1894; *Mgt.* Govt.; *Course* Teachers' Training Cert. in Domestic Sc. (T.C.D.).
3. Home Science College, Hubli (Dharwar): *f.* 1965; *Mgt.* Private; *Course* Dip. in Home Sc.

Delhi

1. Lady Irwin College, New Delhi: *f.* 1932; *Mgt.* Private; *Course* Dip. in Home Sc.

4. Engineering, Technology and Industry

Andhra

1. A.J.K. Industrial School, Masulipatnam: *f.* 1960; *Mgt.* Private *Course* Cert. *of* Mech. Draughtsmanship.
2. Alladin Technical Training Institute, Hyderabad: *f.* 1955; *Mgt.* Private; *Courses* Certs. in Craftsmanship (Auto. Mechanic, Electrician and Radio Mechanic).
3. Andhra Polytechnic, Kakinda: *f.* 1946; *Mgt.* Govt.; *Courses* Dips., in Engg. (Auto., Civil, Elect., Mech. and Radio), and Fisheries Tech. and Navigation.
4. Central Crafts Institute, Mallapally, Hyderabad: *f.* 1954; *Mgt.* Govt.; *Courses* Certs. in Electrical and Radio Mech. Engg.
5. E.S.C. Government Polytechnic, Nandyal:*f.* 1960; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
6. Government Polytechnic, Vijayawadah: *f.* 1946; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
7. Government Ceramic Institute, Gudur: *f.* 1944; *Mgt.* Govt.; *Courses* Dips. in Ceramics (Glass and Enamel, Potteries and Refractories).
8. Government Engineering College, Anantapur: *f.* 1946; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
9. Government Mining Institute, Gudur: *f.* 1957; *Mgt.* Govt.; *Courses* Dips. in Coal Mining and Non-coal Mining.
10. Government Mining Institute, Kothagudem:*f.* 1957; *Mgt.* Govt.; *Courses* Dips. in Coal Mining and Non-coal Mining.
11. Government Polytechnic, Anantapur: *f.* 1960; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
12. Government Polytechnic for Girls, Kakinada: *f.* 1961; *Mgt.* Govt.; *Courses* Dips. in Civil and Elect. Commn.. Engg., Architecture and Pharmacy.
13. Government Polytechnic, Guntur: *f.* 1960; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.) and Text. Tech.
14. Government Polytechnic, Hyderabad: *f.* 1923; *Mgt.* Govt.; *Courses* Dips. in Engg. (Auto., Civil, Elect., Elect. Commn. and Mech.).
15. Government Polytechnic, Mahbubnagar: *f.* 1958; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).

16. Government Polytechnic, Nellore: *f.* 1960; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
17. Government Polytechnic, Nizamabad: *f.* 1959; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
18. Government Polytechnic, Prodattur: *f.* 1959; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
19. Government Polytechnic, Srikakulam: *f.* 1961; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
20. Government Polytechnic, Vijayawada: *f.* 1946; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
21 .Government Polytechnic, Visakhapatnam: *f.* 1956; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.). Sandwich course in Mech. Engg.
22. Government Polytechnic, Warangal: *f.* 1955; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
23. Industrial Training Institute, Anantapur: *f.* 1941; *Mgt.* Govt.; *Course* Electrician Cert.
24. Industrial Training Institute, Kakinada: *f.* 1940; *Mgt.* Govt.; *Courses* Certs. for Electrician and Instrument Mechanic.
25. Industrial Training Institute, Nellore: *f.* 1957; *Mgt.* Govt.; *Course* Electrician Cert.
26. Industrial Training Institute, Nizamabad: *f.* 1956; *Mgt.* Govt.; *Course* Electrician Cert.
27. Industrial Training Institute, Vijaywada: *f.* 1941; *Mgt.* Govt.; *Course* Electrician Cert.
28. Industrial Training Institute, Visakhapatnam: *f.* 1957; *Mgt.* Govt.; *Course* Electrician Cert.
29. Industrial Training Institute, Warangal: *f.* 1959; *Mgt.* Govt.; *Course* Electrician Cert.
30. Jawaharlal Nehru Polytechnic, Hyderabad: *f.* 1957; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
31. Kamla Nehru Polytechnic for Girls, Hyderabad: *f.* 1961; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Commn., Elect. and Mech.) and Architecture, D.A., Pharmacy, Catering and Food Technology.
32. K.D.R. Polytechnic, Wanaparthy: *f.* 1959; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
33. S.M.V.M. Polytechnic, Tanukuh: *f.* 1958; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
34. Sri Venkateswara Government Polytechnic, Tirupati: *f.* 1957; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).

Assam

1. Assam Engineering Institute, Gauhati: *f.* 1948; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
2. Girls Polytechnic, Gauhati:*f.* 1964; *Mgt.* Govt.; *Courses* Dip. in Civil Draughtsmanship.
3. H.Q.H. The Prince of Wales Institute of Engineering and Technology, Jorhat: *f.* 1948; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
4. Industrial Training Institute, Aijal: *f.* 1964; *Mgt.* Govt.; *Course* Electrician Cert.

5. Industrial Training Institute, Barpeta: *f.* 1964; *Mgt.* Govt.; *Course* Electrician Cert.
6. Industrial Training Institute, Gauhati: *f.* 1960; *Mgt.* Govt.; *Courses* Electrician Cert., Draughtsmanship Civil and Radio-Mechanics.
7. Industrial Training Institute, Jorhats *f.* 1954; *Mgt.* Govt.; *Courses* Electrician Cert., Draughtsmanship (Civil) and Surveyors Cert.
8. Industrial Training Institute, Nowgong: *f.* 1960; *Mgt.* Govt.; *Course* Electrician Cert.
9. Industrial Training Institute, Shillong: *f.* 1964; *Mgt.* Govt.; *Course* Electrician Cert.
10: Industrial Training Institute, Srikona: *f.* 1957; *Mgt.* Govt.; *Courses* Electrician Cert., Draughtsmanship (Civil).
11. Industrial Training Institute, Tezpur: *f.* 1960; *Mgt.* Govt.; *Course* Electrician Cert.
12. Industrial Training Institute, Tinsukhia: *f.* 1964; *Mgt.* Govt.; *Course* Electrician Cert.
13. Nowgong Polytechnic, Nowgong: *f.* 1961; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
14. Silchar Polytechnic, Silchar: *f.* 1960; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).

Bihar

1. Bhagalpur School of Engineering, Bhagalpur: *f.* 1955; *Mgt.* Govt.; *Course* Dip. in Engg. (Civil).
2. Chaibassa Technical School, Chaibassa: *f.* 1955; *Mgt.* Govt.; *Courses* Cert. in Iudustrial Trades (Electrician and General Mech.).
3. Dhanbad Polytechnic, Dhanbad: *f.* 1958; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
4. Indian School of Mines and Applied Geology, Dhanbad: *f.* 1926; *Mgt.* Central Govt.; *Courses* Associateship of I.S.M. in Mining Engg., Applied Geology, Applied Geo.-Phys. and Petroleum Tech.
5. Industrial Training Institute, Bhagalpur: *f.* 1956; *Mgt.* Govt.; *Courses* Certs. in Industrial Trades (Electrician and General Mechanic, Draftsmanship (Civil).
6. Industrial Training Institute, Darbhanga: *f.* 1956; *Mgt.* Govt.; *Courses* Certs. in Industrial Trades, Draftsmanship (Mech.).
7. Industrial Training Institute, Dhanbad: *f.* 1958; *Mgt.* Govt.; *Courses* Certs. in Industrial Trades (Electrician and General Mechanic).
8. Industrial Training Institute, Digha: *f.* 1948; *Mgt.* Govt.; *Courses* Certs. in Industrial Trades (Electrician and General Mechanic), Draftsmanship (Mech.).
9. Industrial Training Institute, Gaya: *f.* 1959: *Mgt.* Govt.; *Courses* Certs. in Industrial Trades (Electrician and General Mechanic).
10. Industrial Training Institute, Katihar: *f.* 1958; *Mgt.* Govt.; *Courses* Certs. in Industrial Trades (Electrician and General Mechanic).
11. Industrial Training Institute, Kodarma: *f.* 1956; *Mgt.* Govt.; *Courses* Certs. in Industrial Trades.
12. Industrial Training Institute, Muzaffarpur: *f.* 1958; *Mgt.* Govt.; *Courses* Certs. in Industrial Trades (Electrician and General Mechanic), Draftsmanship (Civil and Mech.).

13. Jamshedpur Technical Institute, Jamshedpur: *f.* 1921; *Mgt.* Private; *Courses* Dips. in Engg. (Elect., Mech. and Met.), (Post-Graduate Dip. in Engg. and Met.).
14. Junior Technical School, Dehri: *f.* 1955; *Mgt.* Govt.; *Courses* Cert. in Industrial Trades.
15. Junior Technical School, Marhowrah (Saran): *f.* 1955; *Mgt.* Govt.; *Courses* Certs. in Mech. Draftsmanship and General Mechanic).
16. Kodarma Mining Institute, Kodarma: *f.* 1958; *Mgt.* Govt.; *Course* Dip. in Mining.
17. Mining Classes, P.O. Bhaga (Dist. Dhanbad): *f.* 1905; *Mgt.* Govt.; *Courses* Certs. of Merit in Coal Mining and Elect. Supervisor, Dip. in Coal Mining.
18. Patna Polytechnic, Patna: *f.* 1956; *Mgt.* Govt.; *Courses* Dips. in Ceramics, Metal Works & Text. Tech., Certs. in Turning, Machinist, Sheet Metal and Welding.
19. Patna School of Engineering, Patna: *f.* 1955; *Mgt.* Govt.; *Course* Dip. in Civil Engg.
20. Ranchi School of Engineering, Ranchi: *f.* 1955; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
21. Ranchi Technical Training School, Ranchi: *f.* 1955; *Mgt.* Govt.; *Courses* Draftsman (Civil) and Electrician Cert.
22. Sindri School of Engineering, Sindri: *f.* 1954; *Mgt.* Govt.; *Courses* Dips. in Engg. (Elect. and Mech.).
23. Tirhut School of Engineering, Muzaffarpur: *f.* 1949; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect, and Mech.).
24. Welfare Technical School, Dumka: *f.* 1958; *Mgt.* Govt.; *Courses* Certs. in Industrial Trades (Electrician and General Mechanic), Draftsmanship (Civil and Mech.).
25. Welfare Technical School, Ranchi: *f.* 1958; *Mgt.* Govt.; *Courses* Certs. in Industrial Trades (Electrician and General Mechanic), Draftsmanship (Civil and Mech.).

Gujarat

1. B. & B. Polytechnic, Vallabh Vidyanagar, Anand: *f.* 1958; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
2. C. N. Polytechnic, Ahmedabad: *f.* 1937; *Mgt.* Private; *Courses* Certs. in Draftsmanship (Civil and Mech.), Estimating and Radio Servicing.
3. Dr. S. & S. Gandhy College of Engineering and Technology Surat: *f.* 1953; *Mgt.* Govt.; *Courses* Dips. in Engg. (Auto, Civil, Elect, Mech. and Met.), Certs. in Civil Draftsmanship and Estimating.
4. Faculty of Technology (Including Engg.), Baroda: *f.* 1890; *Mgt.* Private; *Courses* Dips. in Text. Chem., Text. Tech and Engg. (Civil, Elect. and Mech.), Cert. in Dyeing and Text. Printing.
5. Gandhidham Polytechnic, Adipur: *f.* 1950; *Mgt.* Private; *Course* Dip. in Civil Engg.
6. Government Polytechnic, Ahmedabad: *f.* 1957; *Mgt.* Private; *Course* Dip. in Civil Engg.
7. Government Polytechnic, Bulsar: *f.* 1965; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
8. Govt. Polytechnic, Dohad: *f.* 1959; *Mgt.* Govt.; *Courses* Dips. in Engg. Civil, Elect. and Mech.).

9. Government Polytechnic for Girls, Ahmedabad: *f.* 1964; *Mgt.* Govt.; *Courses* Dips. in Electronics and Radio Engg.
10. Govt. Polytechnic, Porbandar: *f.* 1960; *Mgt.* Govt.; *Course* Dips. in Engg. (Civil, Elect. and Mech.).
11. Government Polytechnic, Rajkot: *f.* 1964; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
12. K. D. Polytechnic, Patan: *f.* 1960; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
13. K. J. Polytechnic, Broach: *f.* 1961; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
14. Lukhdhirji Engineering College, Morvi: *f.* 1951; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
15. Polytechnic, Baroda: *f.* 1957; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech,).
16. R. C. Technical Institute, Ahmedabad: *f.* 1947; *Mgt.* Govt.; *Courses* Dips. in Text. Chem. and Text. Manufacture.
17. Shri *A. V.* Parikh Technical Institute, Rajkot: *f.* 1948; *Mgt.* Govt.; *Courses* Dips. in Radio Engg., Sound Engg. and Elect. Engg.
18. Sir Bhavsinhji Polytechnic, Bhavnagar: *f.* 1949; *Mgt.* Govt.; *Courses* Dips. in Engg. (Auto, Civil, Elect. and Mech.) and Tech. (Text. Manufacture).

Haryana

1. Chhotu Ram Polytechnic, Rohtak: *f.* 1956; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
2. Govt. Polytechnic, Ambala City: *f.* 1929; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
3. Govt. Polytechnic, Jhajjar: *f.* 1961; *Mgt.* Govt.; *Course* Dip. in Civil Engg.
4. Govt. Polytechnic, Sirsa: *f.* 1962; *Mgt.* Govt.; *Course* Dip. in Civil Engg.
5. Govt. Surgical Instruments Technology Institute, Sonepat: *f.* 1952; *Mgt.* Govt.; *Courses* Dip. in Surgical Instruments Tech., Dips. in Dye Sinking and Machine Tools.
6. Industrial Training Institute, Ambala: *f.* 1929; *Mgt.* Govt.; *Courses* Certs. for Draftsmen (Civil and Mech.) and Instrument Mech.
7. Industrial Training Institute, Gurgaon: *f.* 1959; *Mgt.* Govt.; *Courses* Certs. for Draftsmen (Civil and Mech.), Electrician and Radio Mech.
8. Industrial Training Institute, Hissar: *f.* 1959; *Mgt.* Govt.; *Courses* Certs. for Draftsmen (Civil and Mech.) and Electrician. Trade Certs. of Electroplator, Instrument Mech. and Pattern Maker.
9. Industrial Training Institute, Mohindergarh: *Mgt.* Govt.; *Course* Radio Mech. Cert.
10. Industrial Training Institute, Narwanah: *Mgt.* Govt.; *Course* Electrician Cert.
11. Industrial Training Institute, Rohtak: *f.* 1950; *Mgt.* Govt.; *Courses* Certs. for Draftsmen (Civil and Mech.) and Electrician.
12. Industrial Training Institute, Sirsa: *f.* 1962; *Mgt.* Govt.; *Courses* Certs. for Elect. and Radio Mechanic.
13. Industrial Training Institute, Sonepat: *f.* 1959; *Mgt.* Govt.; *Courses* Draftsmen Mech. and Electrician Certs.

14. Industrial Training Institute, Yamunanagar: *f.* 1957; *Mgt.* Govt.; *Courses* Certs. for Draftsmen (Civil and Mech.) and Electrician.
15. Punjab Polytechnic, Nilokheri: 1947; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.), Certs. for Civil and Mech. Draftsmanship, Radio Mechanic, Electrician, General Mechanic, Machinist, Turner, Tractor Mechanic and Internal Combustion Engine Mechanic.
16. Vaish Technical Institute, Rohtak: *f.* 1946; *Mgt.* Private; *Course* Dip. in Civil Engg.

Jammu and Kashmir

1. Government Polytechnic, Jammu: *f.* 1960; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.), Draftsman (Civil, Elect. and Mech.).
2. Government Polytechnic, Srinagar: *f.* 1958; *Mgt.* Govt.; *Courses* [illegible] Engg. (Civil, Elect. and Mech.); Draftsman (Civil) Cert.
3. Industrial Training Institute, Anantnag: *f.* 1959; *Mgt.* Govt.; *Courses* Certs. in Trades (Blacksmithy, Carpentry, Cutting and Tailoring, Fitter, Weaving and Wiremen).
4. Industrial Training Institute, Baramula: *f.* 1959; *Mgt.* Govt.; *Courses* Cert. in Trades (Carpentry, Cutting and Tailoring, Electrician Fitter, Sheet Metal Smithy and Textile).
5. Industrial Training Institute, Hiranagar: *f.* 1959; *Mgt.* Govt.; *Courses* Certs. in Trades (Blacksmithy, Carpentry, Cutting and Tailoring, Electrician, Sheet Metal and Turner and Weaving).
6. Industrial Training Institute, Jammu: *f.* 1959; *Mgt.* Govt.; *Courses* Certs. in Trades (Carpentry, Dyeing and Calio Printing, Electrician Fitter, Machinist, Motor Mechanic, Moulder Painting and Decorating, Turner, Weaving and Welding).
7. Industrial Training Institute, Kishtwar: *f.* 1959; *Mgt.* Govt.; *Courses* Cert. in Trades (Blacksmithy, Carpentry, Cutting and Tailoring, Fitter, Weaving and Willow Work Trade).
8. Industrial Training Institute, Rajouri: *f.* 1959; *Mgt.* Govt.; *Courses* Cert. in Trades (Carpentry, Cutting and Tailoring, Fitter and Weaving).
9. Industrial Training Institute, Srinagar: *f.* 1959; *Mgt.* Govt.; *Courses* Cert. in Trades (Carpentry, Electrician, Fitter, Motor Mechanic, Painting and Decorating).

Kerala

1. Alagappanagar Polytechnic, Alagappanagar: *f.* 1956; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech).
2. Carmel Polytechnic, Alleppey: *f.* 1957; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech).
3. Central Polytechnic, Trivandrum: *f.* 1958; *Mgt.* Govt.; *Courses* Dips in Engg. (Civil, Elect. and Mech).
4. Government Polytechnic, Cannanore: *f.* 1958; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
5. Government Polytechnic, Kalamassery: *f.* 1951; *Mgt.* Govt.; *Courses* Dips. in Engg. (Auto, Civil, Elect. and Mech.).
6. Government Polytechnic, Kottayam: *f.* 1960; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
7. Government Polytechnic, Perinthalmanna: *f.* 1961; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).

8. Institute of Textile Technology, Trivandrum: *f.* 1938; *Mgt.* Govt.; *Course* Dip. in Text. Tech.
9. Kerala Polytechnic, Kozhikode: *f.* 1947; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.), Fisheries Tech. and Food Tech.
10. Maharaja's Techonological Institute, Trichur: *f.* 1946; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
11. N.S.S. Polytechnic, Pandalam: *f.* 1957; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
12. Seethi Sahib Memorial Polytechnic, Tirur: *f.* 1962; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
13. S. N. Polytechnic, Quilon: *f.* 1958; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
14. Sri Nityananda Vidyakendra, Kanjangad: *f.* 1965; *Mgt.* Private; *Course* (N.A.).
15. Sri Rama Polytechnic, Thriprayar, Valappad: *f.* 1958; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
16. Women's Polytechnic, Trichur: *f.* 1962; *Mgt.* Govt. *Courses* Dips. in Civil Draftsmanship, Electronics and Costume Design & Dress Making.
17. Women's Polytechnic, Trivandrum: *f.* 1961; *Mgt.* Govt.; *Course* Dip. in Civil Draftsmanship.

Madhya Pradesh

1. Central Technical Institute, Gwalior: *f.* 1905; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.), and Text. Tech., Part-Time Dip. in Elect. and Mech. Engg., Post-Dip. Course in Structural Engg.
2. Government Kirodimal Polytechnic, Raigarh: *f.* 1955; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
3. Government Mining Polytechnic, Khirsadoh: (Chhindwara): *f.* 1969; *Mgt.* Govt.; *Courses* Dip. in Mining & Mine Surveying, Dips. in Elect. and Mech. Engg.
4. Government Mining Polytechnic, Shahdol: *f.* 1960; *Mgt.* Govt.; *Courses* Dip. in Mining & Mine Surveying and Dips. in Elect. and Mech. Engg.
5. Govt. Polytechnic, Durg: *f.* 1962; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect., Mech. and Metallurgy).
6. Government Polytechnic, Jabalpur: *f.* 1955; *Mgt.* Govt.; *Courses* Dips. and Part-time Dips. in Engg. (Civil, Elect. and Mech.).
7. Government Polytechnic, Jaora: *f.* 1955; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
8. Government Polytechnic, Khandwa: *f.* 1960; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
9. Government Polytechnic, Nowgong (Chhattarpur): *f.* 1952; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
10. Government Polytechnic, Ujjain: *f.* 1955; *Mgt.* Govt.; *Courses* Dips. in Engg. (Auto, Civil, Elect. and Mech.).
11. Government Women's Polytechnic, Bhopal: *f.* 1964; *Mgt.* Govt.; *Courses* Dip. in Secretarial Practice and Stenography, Arch., Costume Design and Dress Making.
12. Govindram Seksaria Technological Institute, Indore: *f.* 1952; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect., Mech. and Structural Engg.).

13. Kala Niketan, Jabalpur: *f.* 1957; *Mgt.* Govt.; *Courses* Certs. in Boiler & Engine Maintenance & Attendance, Draughtmanship & Estimating (Civil and Mech.), Elect. Installation, Internal Combustion Engines (Maintenance and Repairs), Radio Servicing & Operation and Welding Tech., Dip. in Printing Tech.
14. Leather Technological Institute, Morar (Gwalior): *f.* 1956; *Mgt. Mgt.* Govt.; *Courses* Dip. in Leather Manufacture, Leather Articles and Footwear Tech.
15. Polytechnic, Ashknagar (Guna): *f.* 1964; *Mgt.* Private; *Course* Dip. in Civil Engg.
16. Polytechnic, Balaghat: *f.* 1962; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
17. Polytechnic, Dhamtari (Raipuri):*f.* 1962; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
18. Polytechnic, Harda (Hoshangabad): *f.* 1962; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
19. Polytechnic Institute, Kurari: *f.* 1955; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
20. Polytechnic, Seoni: *f.* 1964; *Mgt.* Private; *Course* Dip. in Civil Engg.
21. Samrat Ashok Technological Institute, Vidisha: *f.* 1956; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
22. S. V. Government Polytechnic Institute, Bhopal: *f.* 1954; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.) and part-time Dips. in Elect. and Mech. Engg.
23. Vaishnav Technological Institute, Indore: *f.* 1961; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect and Mech.) and part-time Dips. in Elect. and Mech. Engg.

Madras

1. Alagappa Polytechnic, Alagappa College Post, Karaikudi: *f.* 1955; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
2. Annamalai Polytechnic, Chettinad: *f.* 1956; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
3. Bhaktavathalam Polytechnic, Kancheepuram: *f.* 1959; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
4. Central Polytechnic, Madras: *f.* 1916; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.), Fisheries Tech. and Navigation, Sandwich Course in Mech. Engg., A.M.I.E., Post. Dip. in Town & Country Planning. Post Dip. in Refrigeration and Airconditioning.
5. C. N. Technical and Industrial Institute, Vepery, Madras: *f.* 1906; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
6. Comentore Institute of Technology Sandwich Polytechnic, Coimbatore: *f.* 1961; *Mgt.* Private; *Course* Sandwich Course in Mech. Engg. (L.M.E.).
7. Govt. Polytechnic, Aerodrome Post, Coimbatore:*f.* 1945; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
8. Govt. Polytechnic For Women, Coimbatore: *f.* 1964; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.), Cert. in Civil Draughtmanship.
9. Government Polytechnic For Women, Adyar, Madras-20: *f.* 1962; *Mgt.* Govt.; *Courses* Dips. in Costume Designing and Dress Making and

Electronics (Radio Engg.), Dips. in Civil Engg., Draftsmanship and Commercial Practice.

10. Govt. Polytechnic For Women, Madurai: *f.* 1964; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil and Mech.), Civil Draughtsmanship and Commercial Practice.
11. Govt. Polytechnic, Nagercoil: *f.* 1959; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
12. Govt. Polytechnic, Trichy: f. 1963; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
13. Govt. Polytechnic, Tuticorin: *f.* 1963; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
14. Govt. Polytechnic, Vellore: *f.* 1959; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
15. Institute of Chemical Technology, Madras-20: *f.* 1964; *Mgt.* Govt.; *Course* Dip. in Chemi. Tech.
16. Institute of Film Technology, Broadway, Madras: *f.* 1960; *Mgt.* Govt.; *Courses* Dips. in Cinematography, Film Processing and Sound Engg.
17. Institute of Leather Technology, Adyar, Madras: *f.* 1946; *Mgt.* Govt.; *Course* Lic in Leather Tech.
18. Institute of Textile Technology, Madras-20: *f.* 1965; *Mgt.* Govt.; *Course* Dip. in Text. Tech.
19. Madras Institute of Technology, Chromepet, Madra-44: *f.* 1949; *Mgt.* Private; *Courses* Dips. in Engg. (Aeronautical, Automobile and Electronics) and in Instrument Tech.
20. Murugappa Chettiar Memorial Polytechnic, Avadi, Madras: *f.* 1957; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
21. Muthiah Polytechnic, Annamalainagar: *f.* 1958; *Mgt.* Annamalai University; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
22. Nachimuthu Polytechnic, Pollachi: *f.* 1957; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.), Post-Dip. in Auto. Engg.
23. P.A.C. Ramaswami Raja Polytechnic, Rajapalayam: *f.* 1960; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.), and Text. Tech.
24. P.S.G. Polytechnic, Coimbatore:*f.* 1939; *Mgt.* Private; *Courses* Dips. in Engg. (Elect. and Mech.), Post-Dip. Courses in Production Engg. and Industrial Engg.
25. Rajagopal Polytechnic, Gudiyatham: *f.* 1960; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
26. Ramakrishna Mission Technical Institute, Madras: *f.* 1925; *Mgt.* Private; *Courses* Dips. in Engg. (Elect. and Mech.).
27. Regional School of Printing, Broadway, Madras-1: *f.* 1958; *Mgt.* Govt.; *Courses* Dips. in Letter Press Group. Lithographic Art. *Courses* in Printing.
28. Sanker Institute of Polytechnic, Talaiüthu (Tirunelveli): *f.* 1958; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
29. Seshasayee Institute of Technology, Tennur, Tiruchirapalli: *f.* 1952; *Mgt.* Private.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
30. Srinivasa Subharaya Polytechnic, Puttur (Viamayuram): *f.* 1960; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
31. Tamilnad Polytechnic, Madurai: *f.* 1947; *Mgt.* Govt.; *Courses* Dips.

in Engg. (Civil, Elect. and Mech.), Sandwich Course, Post Dip. in Auto. Engg.

32. Thiagarajar Polytechnic, Salem: *f.* 1958; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.) and Text. Manufacture.
33. Valivalam Desikar, Polytechnic, Nagapatinam: *f.* 1958; *Mgt.* Private; *Courses* Dips. in Engg. Civil, Elect. and Mech.).
24. Virudhunagar S. Villaichamindar Polytechnic, Virudhunagar: *f.* 1958; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).

Maharashtra

1. Abhinava Kala Vidyalaya, Poona-9: *f.* 1952; *Mgt.* Private; *Course* Dip. in Architecture.
2. Bhagubhai Mafat Technical Institute, Vile Parle, Bombay: *f.* N.A.; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
3. Bombay Technical School, Bomray: *f.* 1941; *Mgt.* Private; *Course* Cert. in Engg. Apprenticeship.
4. College of Engineering, Poona: *f.* 1854; *Mgt.* Govt.; *Courses* Dips. in Elect. Communication and Met.
5. D.E. Society's Technical Institute, Poona: *f.* 1937; *Mgt.* Private; *Course* Dip. in Paint and Soap Tech.
6. Government Institute of Leather Technology, Andheri, Bombay: *f.* 1939; *Mgt.* Govt.; *Course* Cert. in Leather Tech.
7. Government Leather Working School, Bandra: *f.* 1939; *Mgt.* Govt.; *Course* Dip. in Advance Leather Goods and Footwear Manufacture.
8. Government Polytechnic, Amravati: *f.* 1955; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
9. Government Polytechnic, Aurangabad: *f.* 1955; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
10. Government Polytechnic, Bombay: *f.* 1960; *Mgt.* Govt.; *Course* Dip. in Civil Engg.
11. Govt. Polytechnic, Dhulia: *f.* 1961; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
12. Govt. Polytechnic, Jalgaon: *f.* 1960; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
13. Government Polytechnic, Karad: *f.* 1957; *Mgt.* Govt.; *Courses* Dips in Engg. (Civil, Elect. and Mech.).
14. Government Polytechnic, Khamgaon: *f.* 1961; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
15. Government Polytechnic, Kolhapur: *f.* 1961; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
16. Government Polytechnic, Nagpur: *f.* 1957; *Mgt.* Govt.; *Courses* Dips. in Art Architecture and Engg. (Auto., Civil, Elect. and Mech.).
17. Government Polytechnic, Nanded:*f.* 1964; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
18. Government Polytechnic, Poona: *f.* 1957; *Mgt.* Govt.; *Courses* Dips in Engg. (Civil, Elect. and Mech.).
19. Government Polytechnic, Ratnagiri: *f.* 1961; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
20. Government Polytechnic, Sholapur: *f.* 1956; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).

21. Government Polytechnic, Yeotmal: *f.* 1964; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
22. Government Tanning Institute, Bandra, Bombay: *f.* 1939; *Mgt.* Govt.: *Course* Dip. in Leather Manufacturing.
23. Indian Radio Institute, Residency Radio, Nagpur-1: *f.* 1946; *Mgt.* Private; *Course* Radio Servicing.
24. Industrial Training Institute, Ahmednagar: *f.* 1960; *Mgt.* Govt.; *Courses* Turner and Fitter Cert.
25. Industrial Training Institute, Akola: *f.* 1958; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
26. Industrial Training Institute, Ambernath (Distt. Thana): *f.* 1958; *Mgt.* Govt.; *Courses* Trades Courses.
27. Industrial Training Institute, Amravati: *f.* 1959; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
28. Industrial Training Institute, C/o S. P. College of Engineering, Versova Road, Andheri (Bombay-58): *f.* 1963; *Mgt.* Govt.; *Courses* Electrician Cert.
29. Industrial Training Institute, Aundh (Poona): *f.* 1956; *Mgt.* Govt.; *Courses* Trades Courses.
30. Industrial Training Institute, Aurangabad: *f.* 1957; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
31. Industrial Training Institute, Bhir: *f.* 1963; *Mgt.* Govt.; *Courses* Dips in Engg. (Civil, Elect. and Mech.).
32. Industrial Training Institute, Bombay: *f.* 1965; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
33. Industrial Training Institute, Dhulia: *f.* 1959; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
34. Industrial Training Institute, Gondia (Bhandara): *f.* 1962; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
35. Industrial Training Institute, Jalgaon: *f.* 1960; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
36. Industrial Training Institute, Karad (Distt. Satara): *f.* 1959; *Mgt.* Govt.; *Courses* Trade Courses.
37. Industrial Training Institute, Khamgaon: *f.* 1962; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.), Turner's Cert.
38. Industrial Training Institute, Kolhapur: *f.* 1967; *Mgt.* Govt.; *Courses* Trade Courses.
39. Industrial Training Institute, Latur (Osmanabad): *f.* 1963; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
40. Industrial Training Institute, Nagpur: *f.* 1957; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
41. Industrial Training Institute, Nanded: *f.* 1957; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
42. Industrial Training Institute, Nasik: *f.* 1960; *Mgt.* Govt.; *Courses* Trade Courses in Blacksmithy, Carpentry Turners and Fitters.
43. Industrial Training Institute, Panvil (Distt. Kolaba): *f.* 1963; *Mgt.* Govt.; *Courses* Draftsman Mech., Electrician, Instrument Mech. and Pottery Maker.
44. Industrial Training Institute, Parbhani: *f.* 1963; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).

45. Industrial Training Institute, Poona: *f.* 1956; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.), Trade Certs. for Turners, Fitters and Radio Servicing.
46. Industrial Training Institute, Pulgaon (Distt. Wardha): *f.* 1963; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
47. Industrial Training Institute, Ratnagiri: *f.* N.A.; *Mgt.* Govt.; *Course* Trade Courses.
48. Industrial Training Institute, Sangli: *f.* 1962; *Mgt.* Govt.; *Courses* Trade Certs. in Blacksmith, Welding and for Fitters.
49. Industrial Training Institute, Satara: *f.* 1959; *Mgt.* Govt.; *Courses* Trade Certs. in Blacksmithy and Fitters.
50. Industrial Training Institute, Sholapur: *f.* 1965; *Mgt.* Govt.; *Courses* Trade Certs. for Turners and Fitters.
51. Industrial Training Institute, Ulhasnagar: *f.* 1963; *Mgt.* Govt.; *Courses* Trade Certs. in Blacksmithy, Carpentry Turners and Fitters.
52. Industrial Training Institute, Yeotmal: *f.* N.A.; *Mgt.* Govt.; *Courses* Trade Certs.
53. Institute of Catering Technology and Applied Nutrition, Andheri, Bombay: *f.* 1954; *Mgt.* Private; *Courses* Dip. in Hotel Management and Food Tech., Cert. in Craftsmanship in Cookery.
54. Kala Niketan, Amravati: *f.* 1952; *Mgt.* Govt.; *Courses* Certs. in Draftsmanship (Civil) and Estimating.
55. K. J. Somaiya Polytechnic Institute, Bombay: *f.* 1963; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
56. M. G. Textile Technology School, Parel, Bombay: *f.* 1924; *Mgt.* Private; *Courses* Cert. in Weaving and Spinning.
57. M. H. Saboo Siddik Polytechnic, Bombay: *f.* 1936; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
58. Miraj Institute of Engineering, Miraj: *f.* 1959; *Mgt.* Private; *Courses* Certs. in Civil Draftsmanship and Estimating and Mech. Draftsmanship.
59. Nagpur Shikshan Mandal's Radio Institute, Nagpur: *f.* 1954; *Mgt.* Private; *Course* Radio Servicing.
60. Navbharat Audiyogiga Vidalaya, Bombay: *f.* 1933; *Mgt.* Private; *Courses* Certs. in Draftsmanship (Civil) and Estimating.
61. Northcot Technical High School, Sholapur: *f.* 1939; *Mgt.* Govt.; *Courses* Certs. in Draftsmanship (Civil) and Estimating.
62. P. L. Government Polytechnic, Lathur: *f.* 1955; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
63. Regional Engineering College, Azad Maidan, Worli Road, Bombay: *f.* 1948; *Mgt.* Central Govt.; *Course* Navigation Engg. Cert.
64. Sangli Technical Institute, Sangli: *f.* 1961; *Mgt.* Private; *Course* Mech. Draftsman Cert.
65. School of Printing Technology, Bombay: *f.* 1956; *Mgt.* Govt.; *Course* Dip. in Printing Tech. (Letter Press and Lithography).
66. Silk and Art Silk Mills Research Association, "Sasmir", Bombay-18: *f.* 1961; *Mgt.* Private; *Course* Cert. in Wet Processing of Man-made Textiles.
67. Sir Cusrow Wadia Institute of Technology, Poona: *f.* 1938; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect., Mech. and Radio), Cert. for Draftsman (Mech.).

68. Sir J. J. College of Architecture, Bombay: *f.* 1952; *Mgt.* Govt.; *Courses* Dip. in Arch. and Cert. in Town Planning and Valuation.
69. St. Xavier's Technical Institute, Bombay: *f.* 1937; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect., Mech. and Radio and Sound).
70. Victoria Jubilee Municipal School, Poona: *f.* 1889; *Mgt.* Private; *Course* Cert. in Mech. Draftsmanship.
71. Victoria Jubilee Technical Institute, Matunga, Bombay: *f.* 1887; *Mgt.* Private; *Courses* Dips. in Text. and Applied Chem., Text. Manufacture and Engg. (Civil and Sanitary, Elect. and Mech.).
72. Walchand Engineering College, Sangli: *f.* 1955; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).

Mysore

1. Acharya Pathasala Polytechnic, Basavangudi, *P.O.* Bangalore-4: *f.* 1958; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
2. Basaveswara V.V.S. Polytechnic, Bagalkote, Bijapur: *f.* 1958; *Mgt.* Private; *Courses* Dips. in Engg. (Civil,, Elect. andp Mech.).
3. B.V. Bhoomaraddi College of Engineering, Hubli: *f.* 1958; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
4. C.P.C. Polytechnic, Mysore: *f.* 1954; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
5. D.A.C.G. Polytechnic, Chikmagalur: *f.* 1958; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
6. D.R.R. Polytechnic, Devanagere: *f.* 1949; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
7. Govt. Polytechnic, Bijapur: *f.* 1963; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
8. Govt. Polytechnic, Raichur: *f.* 1961; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
9. Karnatak Polytechnic, Bangalore: *f.* 1928; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
10. K.H. Kabbur Institute of Engineering, Dharwar: *f.* 1958; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
11. M.E.I. Polytechnic, Rajajinagar, Bangalore: *f.* 1958; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
12. National Institute of Engineering, Mysore: *f.* 1946; *Mgt.* Private; *Courses* Dip. in Engg. (Civil).
13. Polytechnic, Belgaum: *f.* 1956; *Mgt.* Govt.; *Courses* Dips. in Engg. Elect. and Mech.).
14. Polytechnic, Bellary: *f.* 1948; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
15. Polytechnic, Bidar:. *f.* 1960; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.)
16. Polytechnic, Channapatna (Bangalore): *f.* 1956; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
17. Polytechnic, Chintamani: *f.* 1950; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
18. Polytechnic for Women, Bangalore: *f.* 1961; *Mgt.* Govt.; *Courses* Dips. in Civil, Engg. (Draftsmanship). Costume Design and Dress Making.
19. Polytechnic for Women, Hubli: *f.* 1963; *Mgt.* Govt.; *Courses* Dips in Engg., Draughtsmanship, Costume Design and Dress Making.

20. Polytechnic, Gulbarga: *f.* 1955: *Mgt.* Govt.; *Courses* Dip. in Engg. (Civil).
21. Polytechnic, Karwar: *f.* 1958; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
22. Polytechnic, Krishnarajpet (Mandya): *f.* 1960; *Mgt.* Govt.; *Courses* in Engg. (Civil, Elect. and Mech.).
23. Polytechnic, Kushalnagar (Somawarpet), Coorg: *f.* 1961; *Mgt.* *Courses* Dips. in Engg. (Civil and Mech.).
24. Polytechnic, Tumkur: *f.* 1958; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
25. School of Engineering, Bangalore: *f.* 1913; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
26. School of Mines, Kolar G. F., Ooragaum, Kolar: *f.* 1957; *Mgt.* Govt.; *Course* Dip. in Mining.
27. Silver Jubilee Polytechnic, Bhadravati: *f.* 1950; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
28. Smt. L.V. Polytechnic, Hassan: *f.* 1949; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
29. Sri Jayachamarajendra Polytechnic, Bangalore: *f.* 1943; *Mgt.* Govt.; *Courses* Dips. in Engg. Civil, Elect., Mech., Radio, Sanitary and Sound), Auto., Boilers & Engines, Ceramics, Cinematography, Instrument Mechanics, Welding and Sheet Metal Mechanics, Mining and Printing Tech.
30. Sri K. Silver Jubilee Technological Institute, Bangalore: *f.* 1938; *Mgt.* Govt.; *Courses* Dips. in Text. Tech.

Orissa

1. Automobile and Diesel Training Institute, Cuttack: *f.* 1956; *Mgt.* Govt.; *Course* Cert. in Engg. (Auto.).
2. Berhampur Engineering School, Berhampur: *f.* 1955; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
3. Bhadrak, Engineering School, Bhadrak: *f.* 1958; *Mgt.* Private; *Course* Dip. in Engg.
4. Engineering School, Jharsuguda: *f.* 1955; *Mgt.* Govt.; *Courses* National Certs. in Engg. (Civil, Elect. and Mech.).
5. Engineering School, Kendrapara: *f.* 1960; *Mgt.* Govt.; *Courses* National Certs. in Engg. (Civil, Elect. and Mech.).
6. Industrial Training Center, Cuttack: *f.* 1950; *Mgt.* Govt.; *Courses* Cert. in Tech. Trades.
7. Industrial Training Institute, Balasore: *f.* 1958; *Mgt.* Govt.; *Course* Cert. in Tech. Training.
8. Industrial Training Institute, Barbil: *f.* 1964; *Mgt.* Govt.; *Course* Cert. in Tech. Trades.
9. Industrial Training Institute, Berhampur: *f.* 1957; *Mgt.* Govt.; *Course* Cert. in Industry.
10. Industrial Training Institute, Bhawanipatna: *f.* 1966; *Mgt.* Govt.; *Course* Cert. in Tech. Trades.
11. Industrial Training Institute, Hirakud: *f.* 1956; *Mgt.* Govt.; *Courses* Draftsman (Civil and Mech.). Cert. and Electrician.
12. Industrial Training Institute, Puri:. 1966; *Mgt.* Govt.; *Course* Cert. in Tech. Trades.

13. Industrial Training Institute, Rourkela: *f.* 1955; *Mgt.* Govt.; *Courses* National Certs. in Engg. (Civil, Elect. and Mech.).
14. Industrial Training Institute, Talchera, (Dhenkanal): *f.* 1966; *Mgt.* Govt.; *Courses* National Certs. in Engg. (Civil, Elect. and Mech.).
15. Orissa School of Engineering, Cuttack: *f.* 1923; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
16. Orissa School of Mining and Engineering, Keonjhar: *f.* 1956; *Mgt.* Govt.; *Courses* Dip. & Cert. Courses in Mining.
17. Rourkela Polytechnic, Rourkela (Sundergarh): *f.* 1965; *Mgt.* Govt.; *Courses* Dip. and Cert. in Engg.
18. Technical Training Institute, Takatpur: *f.* 1957; *Mgt.* Govt.; *Course* Cert. in Industry.

Punjab

1. Govt. Industrial School, Amritsar: *f.* 1962; *Mgt.* Govt.; *Course* Dip. in Cutting & Tailoring.
2. Govt. Industrial School, Ludhiana: *f.* 1925; *Mgt.* Govt.; *Course* Dip. in General Mechanic.
3. Govt. Institute of Dyeing, Printing and Hosiery Technology, Ludhiana: *f.* 1949; *Mgt.* Govt.; *Course* Dip. in Dyeing and Printing.
4. Govt. Polytechnic, Hoshiarpur: *f.* 1962; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect., and Mech.), Certs. in Civil and Mech. Draftsmanship.
5. Govt. Tanning Institute, Jullundur: *f.* 1934; *Mgt.* Govt.; *Course* National Cert. in Leather Chem. and Tech.
6. Guru Nanak Engineering College, Ludhiana: *f.* 1954; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.), Draftsman (Civil and Mech.) Cert.
7. Industrial Training Institute, Batala: *f.* 1962; *Mgt.* Govt.; *Courses* Electrician Cert. Pattern Maker's Cert. and other Trade Certs.
8. Industrial Training Institute, Bhatinda: *f.* 1962; *Mgt.* Govt.; *Courses* Certs. for Instrument Mech., Radio Mech. and Electrician.
9. Industrial Training Institute, Ferozepur City: *f.* 1948; *Mgt.* Govt.; *Courses* Certs. for Surveyors, Draftsmen (Civil and Mech.) and Electrician and Radio Mech.
10. Industrial Training Institute, Ludhiana: *f.* 1959; *Mgt.* Govt.; *Courses* Certs. for Draftsmen Mech., Electrician, Radio Mechanic Electroplator, Wiremen and Pattern Maker.
11. Industrial Training Institute, Nabha: *f.* 1952; *Mgt.* Govt.; *Course* Electrician Cert.
12. Industrial Training Institute, Nangal: *Mgt.* Govt.; *Course* Electrician Cert.
13. Industrial Training Institute, Pathankot: *Mgt.* Govt.; *Course* Certs. for Draftsmen (Mech.) and Surveyor.
14. Industrial Training Institute, Patiala: *f.* 1956; *Mgt.* Govt.; *Courses* Certs. for Draftsmen (Civil and Mech.), Electrician and Radio Mech.
15. Industrial Training Institute, Rajpura: *f.* 1960; *Mgt.* Govt. *Course* Electrician Cert.
16. Industrial Training Institute, Sarahali: *f.* 1962; *Mgt.* Govt.; *Courses* Electrician, Surveyor, Fitter and Radio Mechanic's Certs.
17. I. T. Centre, Dayanand Polytechnic Institute, Amritsar: *f.* 1948;

Mgt. Govt.; *Courses* Certs. for Draftsmen Civil, Electrician and Radio Mech.

18. Mehar Chand Polytechnic and Industrial Training Centre, Jullundur: *f.* 1954; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.), Draftsmen (Civil and Mech.), Certs. Electrician and Radio Mechanic Certs. and Surveyor's Cert.
19. Punjab Institute of Textile Technology, Amritsar: *f.* 1920; *Mgt.* Govt.; *Courses* National Cert. in Text. Tech. and Artisan Cert.
20. Ramgarhia Polytechnic and Industrial Training Centre, Phagwara: *f.* 1950; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.), Draftsman (Civil and Mech.) Certs. and Certs. for Electrician and Radio Mechanic.
21. Thapar Polytechnic, Patiala: *f.* 1956; *Mgt.* Private; *Courses* Dips. in in Engg. (Civil, Elect. and Mech.), Draftsman (Civil and Mech.), Certs.
22. Vishwakarma Institute of Engineering and Technology, Ludhiana: *f.* 1955; *Mgt.* Private; *Courses* Dip. in Civil Engg., Draftsman Civil Cert.

Rajasthan

1. Ajmer Polytechnic, Ajmer: *f.* 1958; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
2. Alwar Polytechnic, Alwar: *f.* 1960; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
3. Bharatpur Polytechnic, Bharatpur: *f.* 1966; *Mgt.* Govt.; *Courses* Dip. in Engg. (Civil).
4. Bikaner Polytechnic, Bikaner: *f.* 1962; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
5. Jaipur Polytechnic, Jaipur: *f.* 1966; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil).
6. Jodhpur Polytechnic, Jodhpur: *f.* 1958; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
7. Kota Polytechnic, Kota: *f.* 1960; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
8. Udaipur Polytechnic, Udaipur: *f.* 1957; *Mgt.* Govt.; *Courses* Dips. in Engg. (Elect., Mech. and Mining).

Uttar Pradesh

1. B.P.K. Govt. Polytechnic, Varanasi:. 1927; *Mgt.* Govt.; *Courses* Cert. in Electroplating and Polishing.
2. Civil Engineering School, Allahabad: *f.* 1955; *Mgt.* Private; *Course* Overseer Cert.
3. Civil Engineering School, Ballia: *f.* 1956; *Mgt.* Private; *Courses* Overseer (Civil) Cert.
4. Civil Engineering School, Chandauli, (Varanasi): *f.* 1957; *Mgt.* Private; *Courses* Dips. in Engineering (Civil, Elect. and Mech.).
5. Civil Engineering School, Lucknow: *f.* 1922; *Mgt.* Private; *Courses* Overseer (Civil) Diploma, Draftsman (Civil) Cert.
6. Deonagri Institute of Engineering, Meerut: *f.* 1956; *Mgt.* Private; *Course* Civil Overseer Dip.
7. D. J. Engineering Institute, Baraut (Meerut): *f.* 1956; *Mgt.* Private; *Course* Dip. in Civil Engg.
8. Gandhi Engineering Institute, Baghra (Muzaffarnagar): *f.* 1956; *Mgt.* Private; *Course* Civil Overseer Dip.

9. GOVT. CENTRAL CLOTH INSTITUTE, KANPUR: *f.* 1914; *Mgt.* Govt.; *Courses* B. Text., Dip. Text.
10. GOVT. CENTRAL WEAVING INSTITUTE, VARANASI: *f.* 1912; *Mgt.* Central Govt.; *Courses* Dip. in Weaving Tech., Advanced Weaving Course, Elementary Weaving and Dyeing Certs.
11. GOVT. COLLEGE, OF ARTS AND CRAFTS, LUCKNOW: *f.* 1911; *Mgt.* Govt.; *Courses* Dips. of Assistantship in Arch., Iron and Heavy Metal-Work, (Carving & Cabinet).
12. GOVT. LEATHER INSTITUTE, AGRA: *f.* 1963; *Mgt.* Govt.; *Courses* Dip. in Leather Tech., Cert. in Leather Goods Manufacture.
13. GOVT. LEATHER WORKING SCHOOL, KANPUR: *f.* 1916; *Mgt.* Govt.; *Course* Dip. in Leather Tech.
14. GOVT. MULTIPURPOSE INSTITUTE, GONDA: *f.* 1965; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
15. GOVT. POLYTECHNIC, ALLAHABAD: *b.* 1940; *Mgt.* Govt.; *Courses* Certs. for General Mechanic, Sheets Smithy Tool Making and Turnery.
16. GOVT. POLYTECHNIC, AZAMGARH: *f.* 1963; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
17. GOVT. POLYTECHNIC, BAREILLY: *f.* 1960; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
18. GOVT. POLYTECHNIC, BASTI: *f.* 1965; *Mgt.* Govt.; *Courses* Dips in Engg. (Civil, Elect. and Mech.).
19. GOVT. POLYTECHNIC, DEHRA DUN: *f.* 1952; *Mgt.* Govt.; *Courses* Certs. for Motor Mechanic and Electrical Supervisor.
20. GOVT. POLYTECHNIC, FAIZABAD: *f.* 1963; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
21. GOVT. POLYTECHNIC, GHAZIPUR: *f.* 1951; *Mgt.* Govt.; *Courses* Elect. Supervisor, Mill-wright, Machinist and Moulding Certs.
22. GOVT. POLYTECHNIC, GORAKHPUR: *f.* 1956; *Mgt.* Govt.; *Courses* Certs. in Motor Mechanic, Tractor Mechanic, Electrical Supervisor and Oil Engine Mechanic.
23. GOVT. POLYTECHNIC, LUCKNOW: *f.* 1950; *Mgt.* Govt.; *Courses* Certs. for Elect. Supervisor, Electroplating, Motor Mechanic, Radio Mechanic and Refrigeration Mechanic.
24. GOVT. POLYTECHNIC, JAUNPUR: *f.* 1954; *Mgt.* Govt.; *Courses* Certs. for Electrician, General Mechanic and Moulding.
25. GOVT. POLYTECHNIC, JHANSI: *f.* 1960; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
26. GOVT. POLYTECHNIC, KANPUR: *f.* 1962; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
27. GOVT. POLYTECHNIC, MEERUT: *f.* 1952; *Mgt.* Govt.; *Courses* Certs. for Electroplating, Elect. Supervisor, General Mechanic, Motor Mechanic and Sheet Metal Mechanic.
28. GOVT. POLYTECHNIC, MIRZAPUR: *f.* 1954; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
29. GOVT. POLYTECHNIC, MORADABAD: *f.* 1964; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
30. GOVT. TECHNICAL INSTITUTE, GORAKHPUR: *f.* 1911; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).

31. Govt. Technical Institute, Jhansi: *f.* 1919; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
32. Govt. Technical Institute, Lucknow: *f.* 1892; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
33. Govt. Women Polytechnic, Lucknow: *f.* 1963; *Mgt.* Govt.; *Courses* Electronics & Architectural Assistantship Certs., Stenography.
34. Govt. Wood Working Institute, Allahabad: *f.* 1918; *Mgt.* Govt.; *Course* Dip. in Advanced Wood Working.
35. Govt. Wood Working Institute, Bareilly: *f.* 1911; *Mgt.* Govt.; *Course* Cert. in Advanced Cabinet Making & Joinery.
36. Hewett Polytechnic, Lucknow: *f.* 1904; *Mgt.* Private; *Course* Dip. in Engg. (Civil).
37. K. L. Technical Institute, Roorkee: *f.* 1956; *Mgt.* Private; *Course* Dips. in Engg. (Civil, Elect. and Mech.).
38. Lucknow Polytechnic, Lucknow: *f.* 1922; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
39. M. G. Technical Institute, Hathras: *f.* 1955; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.). Certs. in Draftsmanship and Engg. (Civil, Elect. and Mech.).
40. M. P. Engineering Institute, Gorakhpur: *f.* 1956; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
41. Nainital Polytechnic, Nainital: *f.* 1957; *Mgt.* Private; *Course* Dip. in Civil Engg.
42. National Sugar Institute, Kanpur: *f.* 1936; *Mgt.* Central Govt.; *Courses* Associateship of N.S.I., in Sugar Tech., Fellowships of N.S.I. in Sugar Chem., Sugar Engg. and Sugar Tech., Certs. in Sugar Engg. and Sugar Boiling.
43. Northern Regional School of Printing Technology, Allahabad: *f.* 1957; *Mgt.* Govt.; *Course* Dip. in Printing Tech. (Full-time and Part-time).
44. Prem Mahavidyalaya Technical Institute, Mathura: *f.* 1909; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
45. R.E.I. Technical College, Dayalbagh, Agra: *f.* 1903; *Mgt.* Private; *Courses* Dips. in Engg. (Auto., Elect. and Mech.).
46. S.G.S.J. Govt. Polytechnic, Khurja: *f.* 1960; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
47. Technical Institute, Handia (Allahabad): *f.* 1957; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
48. Town Polytechnic, Ballia: *f.* 1956; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).

West Bengal

1. Air Technical Training Institute, Dum-Dum, 24-Parganas: *f.* 1948; *Mgt.* Private; *Courses* Dips. in Aircraft Maintenance Engg., Auto., Service Engg., A.M.E.-cum-A.M.Ac.S.I. Master Aero Mechanic.
2. Asansol Polytechnic, Dhadka, P. P. Asansol: *f.* 1956; *Mgt.* Govt.; *Courses* Dips. in Engg. (Elect., Mech. and Mining).
3. Birla Institute of Technology, Emerald Bower, 56, A.B.T. Road, Calcutta: *f.* 1960; *Mgt.* Private; *Course* Dip. in Mech. Engg. (Sandwich System).
4. B.C.P. Institute of Technology, Krishnagar (Nadia): *f.* 1956; *Mgt.*

Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.). Cert. in Draftsmanship.

5. Calcutta Technical School, Calcutta: *f.* 1927; *Mgt.* Private; *Courses* Dips. in Engg. (Elect. and Mech.). Plumbing and Sanitary Engg., Certs. in Elect. Supervisor and Shipwright.
6. Central Calcutta Polytechnic, 21-Convent Road, Calcutta-14: *f.* 1964; *Mgt.* Private; *Courses* L.C.E., L.E.E., L.R.C.E.
7. College of Leather Technology, Canal South Road, Calcutta: *f.* 1919; *Mgt.* Govt.; *Courses* Certs. in Boots, Shoes and Leather Goods Making.
8. Cooch Behar Polytechnic, Cooch Behar: *f.* 1964; *Mgt.* Private; *Courses*: Information not available.
9. Dan Basic Polytechnic, 15, Govinda Mandol Lane, Calcutta: *f.* 1964; *Mgt.* Private; *Courses* L.C.E., L.M.E.
10. Hooghly Institute of Technology, Hooghly: *f.* 1951; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.), Cert. in Draftsmanship.
11. Industrial Research Laboratory, Canal South Road, Pagladanga, Calcutta-15: *f.* 1921; *Mgt.* Private; *Courses* Dips. in Paint and Varnish Tech. (Technologist and Operative), Soap Making and Ink Adhesive Disinfectants.
12. Institute of Jute Technology, Calcutta: *f.* 1951; *Mgt.* Private; *Course* Dip. in Jute Tech.
13. Jshwar Chandra Vidya Sagar Polytechnic, Jhargram (Midnapur): *f.* 1957; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
14. Jadavpur Archarya P. C. Polytechnic, Jadavpur: *f.* 1952; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.), in Draftsmanship.
15. Jagdish Ch. Polytechnic, Jadavpur: *f.* 1952; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.), Cert. in Draftsmanship.
15. Jagdish Ch. Polytechnic, P.O. Devalaya, 24-Parganas: *f.* 1964; *Mgt.* Govt.; *Courses* Dips. in Engg.
16. Jalpaiguri Polytechnic Institute, Jalpaiguri: *f.* 1950; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.), Cert. in Draftsmanship.
17. Jnan Chand Ghose Polytechnic, 7, Mayurbuanj Road, Calcutta: *f.* 1959; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
18. K. G. Engineering Institute, Vishnupur, Bankura: *f.* 1949; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.), Cert. in Draftsmanship.
19. Malda Polytechnic, Malda: *f.* 1962; *Mgt.* Private; *Courses* L.C.E., L.E.E., L.M.E.
20. M.B.C. Institute of Engineering and Technology, Burdwan: *f.* 1949; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.), Cert. in Draftsmanship.
21. Model Blacksmithy Workshop, Ahmedpur (Sirbhum): *f.* 1964; *Mgt.* Govt.; *Courses* Blacksmithy and Turning Certs.
22. Murshidabad Institute of Technology, P.O. Cosimbazar Raj, Murshidabad: *f.* 1957; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
23. Purulia Polytechnic, Purulia: *f.* 1957; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).

24. R. K. Mission Silpa Mandir, Belur, Howrah: *f.* 1954; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
25. R. K. Mission Silpa Pith, Belghoria (24-Parganas): *f.* 1958; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
26. School of Printing Technology, Jadavpur: *f.* 1956; *Mgt.* Private; *Course* Lic. in Printing Graphic Art (L.P.G.A.).
27. Shree Ramakrishna Silpa Vidyapith, Suri (Birbhum): *f.* 1954; *Mgt.* Private; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
28. Tindharia Polytechnic, Kurseong: *f.* 1964; *Mgt.* Private; *Courses* L.C.E., L.E.E., L.M.E.
29. Women's Polytechnic, 21, Convent Road, Calcutta-14: *f.* 1964; *Mgt.* Private; *Courses* L.C.E., L.A.D.

Chandigarh

1. Central Polytechnic, Chandigarh: *f.* 1959; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
2. Govt. Polytechnic for Women, Chandigarh: *f.* 1962; *Mgt.* Govt.; *Courses* Architectural Assistantship., Dips. in Stenography and Secretarial Practice.
3. Industrial Training Institute, Chandigarh: *f.* 1963; *Mgt.* Govt.; *Courses* Certs. for Radio Mech. and Electrician.

Delhi

1. Delhi College of Engineering, Kashmere Gate, Delhi: *f.* 1941; *Mgt.* Central Govt.; *Courses* National Dip. in Arch., National Certs. in Engg. (Elect. and Mech.).
2. Govind Ballabh Panth Polytechnic, New Delhi: *f.* 1961; *Mgt.* Delhi Admn.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
3. Pusa Polytechnic, Delhi: *f.* 1962; *Mgt.* Delhi Admn.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).
4. Women's Polytechnic, New Delhi: *f.* 1962; *Mgt.* Delhi Admn.; *Courses* Dips. in Interior Decoration & Display, Medical Laboratory Technology, Architectural Assistantship and Commercial Arts.

Manipur

1. Adimjati Technical Institute, Imphal: *f.* 1956; *Mgt.* Private; *Courses* National Certs. in Engg. (Civil, Elect, and Mech.).
2. Industrial Training Institute, Imphal: *f.* 1959 *Mgt.* Central Govt.; *Courses* Surveyor and Draftsman Certs. Trades.

Pondicherry

1. Motilal Nehru Polytechnic, Pondicherry: *f.* 1961; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).

Tripura

1. Polytechnic Institution, P.O. Bimangarh, Nursingarh: *f.* 1958; *Mgt.* Govt.; *Courses* Dips. in Engg. (Civil, Elect. and Mech.).

5. Forestry

Madràs

1. Southern Forest Rangers' College, Coimbatore: *f.* 1912; *Mgt.* Central Govt.; *Courses* Forest Rangers' Certs. (Hons., Higher Standard and Lower Standard).

Uttar Pradesh

1. **Forest Research Institute, Dehra Dun**: *f.* 1938; *Mgt.* Central Govt.; *Courses* Research Training Cert. in Seasoning and Preservation of Timber.
2. **Indian Forest College, Dehra Dun**: *f.* 1938; *Mgt.* Central Govt.; *Courses* Dip. in Forestry.
3. **Northern Forest Rangers' College, Dehra Dun**: *f.* 1878; *Mgt.* Central Govt.; *Courses* Forest Ranger's Cert.

6. General

Bihar

1. **Shiksha Bhawan, Mandir Vidyapith, via Barahat (Distt. Bhagalpur)**: *f.* 1946; *Mgt.* Private; *Courses* Madhya, Vidya Bhushan.

Maharashtra

1. **Bombay College of Journalism, K. C. College Building, Church Gate, Dinshaw Wacha Road, Bombay**: *f.* 1960; *Mgt.* Private; *Course* Dip. in Journalism.
2. **Demographic Training and Research Centre, Govandi Station Road, Chembur, Bombay-71**: *f.* 1956; *Mgt.* Central Govt.; *Courses* Cert. and Dip. in Demography.

Pondicherry

1. **French College, Pondicherry**: *f.* 1826; *Mgt.* Govt.; *Courses* Baccalaureates Letters, Baccalaureates Sciences (I and II Parts). Affiliated to University of Rennes, France.
2. **Modern College, Karikal**: *f.* 1951; *Mgt.* Govt.; *Course* Baccalaureates Sciences (1st Part). Affiliated to University of Rennes, France.
3. **Shri Aurobindo International Centre of Education, Pondicherry**: *f.* 1951; *Mgt.* Private; *Courses* University Courses in Beng., Bio., Business Organization and Management Chem., Econ., Eng. Literature, French Literature and Gujarati, Hindi Lit., Hist. of Religions, History of the French Literature, Industrial Orgn. and Mgt., Integral Psych., International Relations, Math., Outlines of World Hist., Phil (Indian Integral and Western), Phys. Hist. & Civilization, Psych., Sanskrit, Science of Life, Science of Thought & Genl. Phil., Social Phil., Socio. and World Hist. & Civilization.

7. Marine Training

Maharashtra

1. **Training Ship Dufferin, Bombay**: *f.* 1927; *Mgt.* Central Govt.; *Courses* Dufferin Final Passing Out Cert.

West Bengal

1. **Marine Engineering Training, New Taratala Road, Calcutta**: *f.* 1949; *Mgt.* Central Govt.; *Course* Cert. in Engg. Training (Marine).

8. Medicine and Public Health

Andhra

1. **Andhra Medical College, Visakhapatnam**: *f.* 1923; *Mgt.* Govt.; *Courses* Dip. in Pharmacy, Certs. for Laboratory Technician and Auxiliary Health Workers.

2. Government Ayurvedic College, Hyderabad: *f.* 1941; *Mgt.* Govt.; *Course* Ayurvedic Praveena.
3. Guntur Medical College, Guntur: *f.* 1946; *Mgt.* Govt.; *Course* Cert. for Laboratory Technicians.
4. Kurnool Medical College, Kurnool: *f.* 1956; *Mgt.* Govt.; *Course* Laboratory Technician Cert.
5. Nizamia Government Tibbi College, Hyderabad: *f.* 1938; *Mgt.* Govt.; *Course* Kamil-e-Tib-o-Jarahat (B.M.U.S.).
6. Osmania Medical College, Hyderabad: *f.* 1926; *Mgt.* Govt.; *Courses* Laboratory Technicians' Cert., Dip. in Pharmacy.

Assam

1. Assam Ayurvedic College, Gauhati: *f.* 1943; *Mgt.* Govt.; *Course* D.A.M.S.

Bihar

1. Ajodhya Shiv Kumari Ayurvedic College, Begusarai (Monghyr): *f.* 1946; *Mgt.* Private; *Course* G.A.M.S.
2. Government Ayurvedic College, Patna: *f.* 1926; *Mgt.* Govt.; *Course* G.A.M.S.
3. Government Tibbi College, Patna: *f.* 1947; *Mgt.* Govt.; *Course* Degree in Tibbi (G.U.M.S.).
4. Sheo Ganga Ayurvedic Mahavidyalaya, Madhubani: *f.* 1948; *Mgt.* Private; *Courses* G.A.M.S.
5. Sri Y. N. A. Aslaing Ayurvedic College, Bhagalpur: *f.* 1946; *Mgt.* Private; *Course* G.A.M.S.

Gujarat

1. Akhandananda Shuddha Ayurved Vidyalaya, Mahalaxmi Society, Ellis Bridge, Ahmedabad: *f.* 1959; *Mgt.* Govt.; *Course* B.S.A.M.
2. Arya Kanya Shuddha Ayurved Mahavidyalaya, Baroda: *f.* 1963; *Mgt.* Private; *Course* B.S.A.M.
3. Ayurvedic Mahavidyalaya, Jamngar: *f.* 1954; *Mgt.* Private; *Course* B.S.A.M.
4. Ayurved Pharmacy College, Rajpipla (Baroach): *f.* 1966; *Mgt.* Govt.; *Course* B.Pharm (Ayurved).
5. Balahanuman Shudda Ayurved Mahavidyalaya, Lodra, (North Gujarat): *f.* 1963; *Mgt.* Private; *Course* B.S.A.M.
6. Institute of Ayurvedic Studies and Research, Jamnagar: *f.* 1946; *Mgt.* Private; *Course* B.S.A.M.
7. Maharshi Dayanand Saraswati Shuddha Ayurved Mahavidyalaya, Panakara (Rajkot): *f.* 1963; *Mgt.* Private; *Course* B.S.A.M.
8. O. H. Nazar Ayurveda Mahavidyalaya, Surat: *f.* 1946; *Mgt.* Private; *Course* G.F.A.M.
9. Sheth J. P. Ayurved Vidyalaya, Bhavnagar: *f.* 1954; *Mgt.* Private; *Course* Ayurved Pravin Dip.
10. Sheth Vadilal Sarabhai General Hospitals and Sheth C. Maternity Hospital, Ellis Bridge, Ahmedabad: *f.* 1950; *Mgt.* Private; *Courses* D.G.O. and F.C.P.S.
11. Shuddha Ayurveda Mahavidyalaya, Nadiad: *f.* 1938; *Mgt.* Private; *Course* B.S.A.M.

12. Shuddha Ayurved Vidyalaya, Ajwa Road. Baroda: *f.* 1956; *Mgt.* Private; *Course* B.S.A.M.
13. Shuddha Ayurved Vidyalaya, Porbandar: *f.* 1961; *Mgt.* Private; *Course* B.S.A.M.

Haryana

1. Shri Mast Nath Ayurved College, Asthar Bohar (Distt. Rohtak): *f.* 1959; *Mgt.* Private; *Course* Ayurvedacharya.

Madhya Pradesh

1. Ashtang Ayurved Mahavidyalaya, Ujjain: *f.* 1949; *Mgt.* Private; *Course* Bhishagacharya.
2. Awantika Ayurved Mahavidyalaya, Ujjan: *f.* 1913; *Mgt.* Private; *Courses* Bhishagacharya, Ayurvedacharya, Bhishag Visharad.
3. Ayurvedic College, Burhanpur (Khandwa): *f.* 1958; *Mgt.* Private; *Course* C.A.P.
4. Government Ayurvedic College, Gwalior: *f.* 1949; *Mgt.* Govt.; *Course* A.M.B.S. (B.A.M.S.).
5. Govt. Ayurvedic College, Raipur: *f.* 1950; *Mgt.* Govt.; *Course* B.A.M.S.
6. Govt. Women's Polytechnic, Bhopal: *f.* 1965; *Mgt.* Govt.; *Course* Dip. in Medical Laboratory Technology.
7. Shri Ashtang Ayurved Mahavidyalaya, Ayurvedic Brahmcharya Ashram, Indore: *f.* 1956; *Mgt.* Private; *Course* Bhishagacharya.
8. Shri Raj Kumar Singh Ayurvedic College, Biyabani, Indore: *f.* 1944; *Mgt.* Private; *Courses* A.M.B.S. (B.A.M.S.), Ayurvedacharya.
9. S. V. Government Polytechnic Institute, Bhopal: *f.* 1954; *Mgt.* Govt.; *Course* Dip. in Pharmacy Education.

Madras

1. Madras Medical College, Madras: *f.* 1936; *Mgt.* Govt.; *Courses* Dip. in Pharmacy, D.M.C.W.
2. Madurai Medical College, Madurai: *f.* 1954; *Mgt.* Govt.; *Course* Dip. in Pharm.

Maharashtra

1. Ashtang Ayurved Mahavidyalaya, 479/11, Sadashiv Peth, Poona-2: *f.* 1936; *Mgt.* Private; *Courses* Ayurved Pravin Dip. D.S.A.C.
2. Ayurveda Mahavidyalaya, Ahmednagar: *f.* 1917; *Mgt.* Private; *Course* G.F.A.M.
3. Ayurvedic Mahavidyalaya, Satara: *f.* 1913; *Mgt.* Private; *Course* G.F.A.M.
4. Ayurved Mahavidalaya, Nasik: *f.* 1954; *Mgt.* Private; *Courses* M.F.A.M., A.V.V.
5. Ayurved Mahavidyalaya, Shri Pakwasa Samanvaya Rugnalaya, Mahal, Nagpur: *f.* 1956; *Mgt.* Private; *Courses* M.F.A.M. & A.V.V.
6. Ayurved Mahavidyalaya, Sion, Bombay: *f.* 1954; *Mgt.* Private; *Courses* M.F.A.M., D.S.A.C.
7. Ayurved Mahavidyalaya, Yeotmal: *f.* 1961; *Mgt.* Private; *Courses* M.F.A.M., A.V.V.
8. B. J. Medical College, Poona: *f.* 1948; *Mgt.* Govt.; *Course* Laboratory Technician's Cert.
9. Bombay College of Pharmacy, Kalina, Bombay-29: *f.* 1957; *Mgt.* Private; *Course* Dip. in Pharm.

10. Bombay Homoeopathic Medical College, Irlanaka, Vileparle (West), Bombay-56: *f.* 1957; *Mgt.* Private; *Course* L.C.E.H.
11. Government Ayurvedic College, Nanded: *f.* 1956; *Mgt.* Govt.; *Courses* M.F.A.M., A.V.V.
12. Grant Medical College, Bombay: *f.* 1845; *Mgt.* Govt.; *Courses* Laboratory Technician's Cert. and X-Ray Technician's Cert.
13. Homoeopathic & Biochemic College, Kelanagar, Khamgaon (M.S.): *f.* 1957; *Mgt.* Private; *Course* D.H.B.
14. Janata Ayurvedic College, Chanda: *f.* 1961; *Mgt.* Private; *Courses* M.F.A.M., A.V.V.
15. Marathwada Ayurvedic Mahavilyalaya, Ganesh Park, Jalana (Aurangabad): *f.* 1955; *Mgt.* Private; *Courses* M.F.A.M.
16. Medical College, Nagpur: *f.* 1947; *Mgt.* Govt.; *Courses* Laboratory Technician's Cert. and X-Ray Technician's Cert.
17. Nagpur College of Homoeopathy and Biochemistry, near Gandhi Sagar (Jumma Tank), Mahal, Nagpur-2: *f.* 1954; *Mgt.* Private; *Course* D.H.B.
18. Occupational Therapy Training School, Bombay: *f.* 1950; *Mgt.* Municipal Corporation; *Course* Dip. in Occupational Therapy.
19. Physiotherapy Training Centre, Bombay: *f.* 1953; *Mgt.* Private; *Course* Dip. in Physiotherapy.
20. Poona College of Pharmacy, Saikpura, 122, Bhawnani Peth, Poona-2: *f.* 1963; *Mgt.* Private; *Course* Dip. in Pharm.
21. Radhakrishna Toshnival Ayurved Mahavidalaya, Akola: *f.* 1955; *Mgt.* Private; *Courses* M.F.A.M., B.A.M.S.
22. R. A. Podar Ayurvedic Medical College, Worli, Bombay: *f.* 1941; *Mgt.* Govt.; *Course* G.F.A.M.
23. Robertson Medical School, Mayo Hospital Compound, Nagpur: *f.* 1914; *Mgt.* Govt.; *Course* Medical and Health Assistants Cert.
24. Sheth S. N. Jain Hospital and Ayurved Mahavidyalaya, Sholapur: *f.* 1962; *Mgt.* Private; *Courses* Ayurved Pravin Dip.
25. Shri Gurdeo Ayurved Mahavidalaya, Guru Kunk Ashram, Mozri (Amravati): *f.* 1959; *Mgt.* Private; *Courses* M.F.A.M., A.V.V.
26. Shri Janata Homeopathic and Biochemic Mahavidyalaya, Anola: *f.* 1958; *Mgt.* Private; *Course* D.H.P.
27. Shri Punurvasu Ayurved Mahavidyalaya, 143-B Gawallia - Tank Road, Cumballa Hill, Bombay: *f.* 1954; *Mgt.* Private; *Courses* Ayurved Pravin Dip., D.S.A.C.
28. Siddharth Ayurved Mahavidyalaya Ruikar Road, Nagpur: *f.* 1961; *Mgt.* Private; *Courses* M.F.A.M. and A.V.V.
29. Sir C. E. M. Dental College, Bombay: *f.* 1945; *Mgt.* Govt.; *Course* Dental Mechanic Cert.
30. Swavalambi Homeopathic and Biochemic Medical College, Wardha: *f.* 1958; *Mgt.* Private; *Course* D.H.B.
31. The Homoeopathic and Biochemic Medical College, Amraoti: *f.* 1956; *Mgt.* Private; *Courses* D.H.B.
32. Topiwala National Medical College, Dr. A. L. Nair Road, Bombay: *f.* 1946; *Mgt.* Bombay Municipal Corporation; *Courses* F.C.P.S., (E.N.T., Medicine, Obstetrics & Gyneocology, Opthalmology, Orthopaedics, Paedia-

trics, Pathology, Skin and Venereal Diseases and Surgery), Ortho., D.A.D.P.M., D.D.V., D.O.M.S., D.P.B.

Mysore

1. Ayurveda Mahavidyalaya, Bijapur: *f.* 1955; *Mgt.* Private; *Course* Ayurvedic Pravin Dip.
2. Government College of Indian Medicine, Mysore: *f.* 1908; *Mgt.* Govt.; *Courses* L.A.M.S., L.U.M.S.

Orissa

1. Gopabandhu Ayurveda Vidyapeeth, Puri: *f.* 1949; *Mgt.* Govt.; *Course* D.A.M.S.

Punjab

1. Arya Medical School, Ludhiana: *f.* 1934; *Mgt.* Private; *Course* L.S.M.F.
2. Dayanand Ayurvedic College, Jullundur: *f.* 1898; *Mgt.* Private; *Course* Vaidya Vachaspati.
3. Government Ayurvedic College, Patiala: *f.* 1952; *Mgt.* Govt.; *Course* Ayurvedacharya (G.A.M.S.).

Rajasthan

1. Ayurved Vishwabharti, Sardar Shahr: *f.* 1956; *Mgt.* Private; *Courses* Pravin *Vaidya*, Bhishagwar, Bhishagacharya.
2. Birla Sanskrit Ayurved College, Pilani: *f.* 1953; *Mgt.* Private; *Courses* Bhishag, Ayurved, Visharad, Ayurved Sastri, Ayurvedacharya, Bhishagwar.
3. Government Ayurved College, Udaipur: *f.* 1944; *Mgt.* Govt.; *Courses* Bhishagwar, Bhishagacharya.
4. Government Ayurvedic College, Jairpur: *f.* 1946; *Mgt.* Govt.; *Courses* Bhishagwar, Bhishagacharya.
5. Shri Hanuman Ayurvedic College, Ratangarh: *f.* 1956; *Mgt.* Private; *Courses* Ayurvedacharya, Bhishagwar.
6. Shri P. R. Ayurvedic College, Sikar: *f.* 1952; *Mgt.* Private; *Courses* Bhishagwar, Ayurvedacharya.
7. Shri Sanatan Dharam Ayurved Vidyalaya, Bikaner: *f.* 1945; *Mgt.* Private; *Courses* Bhishagwar, Ayurvedacharya.

Uttar Pradesh

1. Arjun Darshananand Ayurvedic Vidyalaya, Varanasi: *f.* 1941; *Mgt.* Private; *Courses* A.M.B.S.
2. Ayurvedic College, Attara (Banda Distt.): *f.* 1955; *Mgt.* Private; *Courses* Ayurvedacharya, A.M.B.S.
3. Bundelkhand Ayurvedic College, Jhansi: *f.* 1934; *Mgt.* Private; *Courses* A.M.B.S., Ayurvedacharya.
4. Gurukal University Ayurvedic College, Kangri, Distt. Saharanpur: *f.* 1908; *Mgt.* Private; *Courses* A.M.B.S., Ayurvedacharya.
5. Lalit Hari Ayurvedic College, Pilibhit: *f.* 1899; *Mgt.* Private; *Courses* A.M.B.S., Ayurvedacharya.
6. Rishikul Ayurvedic College, Hardwar: *f.* 1919; *Mgt.* Private; *Courses* A.M.B.S. and Ayurvedacharya.
7. Takmil-ut-Tib College, Lucknow: *f.* 1902; *Mgt.* Private; *Course* F.M.B.S.
8. Unani Medical College, Allahabad: *f.* 1940; *Mgt.* Private; *Course* F.M.B.S.

West Bengal

1. Ayurvidya Pratisthan, 123, Harish Mukherjee Road, Calcutta: *f.* 1925; *Mgt.* Private; *Course* A.S.F.
2. D. N. De Homoeopathic Medical College and Hospital, 63, Acharya Prafulla Chandra Road, Calcutta: *f.* 1927; *Mgt.* Private; *Course* D.M.S.
3. Jamini Bhushan Ashtanga Ayurvedic Vidyalaya and Ayurvedaya Arogyshala, 170, Raja Dinendra Street, Calcuttta: *f.* 1916; *Mgt.* Private; *Courses* M.A.S.F., Ayurveditistha.
4. Nabadwip Ayurved Mahavidyalaya, Nabadwip, Nadia: *f.* 1955; *Mgt.* Private; *Course* A.S.F.
5. Pharmacy Training Centre, Jalpaiguri: *f.* 1949; *Mgt.* Govt.; *Course* Dip. in Pharm.
6. Shyamadas Vaidyashastrapith, 294/3/1, Acharya Prafulla Chandra Road, Calcutta: *f.* 1921; *Mgt.* Private; *Courses* A.S.F., M.A.S.F.
7. The Bengal Allen Homoeopathic Medical College and Hospital, 169, Bepin Behari Ganguli Street, Calcutta: *f.* 1914; *Mgt.* Private; *Course* D.M.S.
8. The Calcutta Homoeopathic Medical College and Hospital, 265, Acharya Prafulla Chandra Road, Calcutta: *f.* 1881; *Mgt.* Private; *Course* D.M.S.
9. The Midnapore Homoeopathic Medical College and Hospital, Midnapore: *f.* 1945; *Mgt.* Private; *Course* D.M.S.
10. Vaidyak Pathshala, Contai, Midnapore: *f.* 1949; *Mgt.* Private; *Course* A.S.F.
11. Vishwanath Ayurveda Mahavidyalaya & Hospital, Calcutta: *f.* 1932; *Mgt.* Private; *Courses* A.S.F., M.A.S.F.

Delhi

1. Ayurvedic & Unani Tibbia College, Delhi: *f.* 1921; *Mgt.* Govt.; *Courses* Ayurvedacharya, Dhanwantri, Bhishagacharya Dhanwantri, Kamil-i-Tib-o-Jarahat, Fazil-i-Tib-o-Jarahat.

Pondicherry

1. School of Nursing, Pondicherry: *f.* 1960; *Mgt.* Govt.; *Courses* Dip. in Nursing and Midwifery.

9. Music and Fine Arts

Andhra

1. Branch School of Music and Dance, Secunderabad: *f.* 1960; *Mgt.* Govt.; *Courses* Certs. in Veena, Violin, Hindustani Vocal, Sitar, Bharat Natyam, Karnatic Vocal.
2. Govt. College of Fine Arts and Architecture, Hyderabad: *f.* 1940; *Mgt.* Govt.; *Courses* Certs. in Fine Arts and Arch.
3. Govt. College of Music and Dance, Secunderabad: *f.* 1945; *Mgt.* Govt.; *Courses* Certs. in Karnatic Veena, Karnatic Violin, Mridhungam, Karnatic Vocal, Hindustani Vocal, Sitar, Tabla, Bharat Natyam, Kathak Dance, Hindustani Violin.
4. Govt. College of Music and Dance, Vijayawada: *f.* 1960; *Mgt. Courses* Cert. in Veena, Violin, Mridhungam, Hindustani Vocal, Bharat Natyam.

5. Govt. M.R. Music College, Vizianagaram: *f.* 1919; *Mgt.* Govt.; *Courses* Certs. in Veena, Violin, Mridhungam, Hindustani Vocal and Bharat Natyam.

Assam

1. Gauhati Music College, Gauhati: *f.* 1946; *Mgt.* Private; *Course* Dip. in Mus.

Chandigarh

1. Government School of Arts, Chandigarh: *f.* 1951; *Mgt.* Govt.; *Courses* Dips. in Applied Art (Iron Work, Jewelry and Enamel, Lacquer Work, Light Metal Work and Wood Work), Drawing and Painting, Clay Modeling, Sculpture and Commercial Art.

Kerala

1. Music Academy, Palghat: *f.* 1957; *Mgt.* Govt.; *Course* Ganabhooshanam.
2. R.L.V. Music Academy, Trippunithura: *f.* 1956; *Mgt.* Govt.; *Course* Ganabhooshanam (Vocal).
3. R.V.School of Painting, Mavelikara: *f.* 1957; *Mgt.* Govt.; *Courses* Cert. in Painting, Dip. in Painting, Post-Dip. in Painting, Cert. in Modeling and Sculpture.
4. School of Arts, Trivandrum: *f.* 1957; *Mgt.* Govt.; *Courses* Certs. in Clay Modeling & Sculpture, Drawing & Painting, Ivory & Wood Carving & Inlay Work, Silver Smithy & Kuftjari Work.
5. S.S.T. Academy of Music, Trivandrum: *f.* 1939; *Mgt.* Govt.; *Courses* Ganabhooshanam (Vocal and Violin), Post-Dip. in Veena, Vocal Music and Violin, Dip. in Dancing.

Madhya Pradesh

1. Bharatiya Kala Bhawan, Ujjain: *f.* 1965; *Mgt.* Private; *Courses* Dip. in Fine and Applied Arts, Advanced Dip. in Fine & Applied Arts.
2. Govt. College of Fine Arts, Gwalior: *f.* 1954; *Mgt.* Govt.; *Courses* Dip. in Drawing & Painting, Dip. in Fine & Applied Arts, Advanced Dip. in Fine & Applied Art.
3. Kala Mahavidyalaya, Indore: *f.* 1954; *Mgt.* Govt.; *Courses* Dip. in Fine & Applied Arts, Advanced Dip. in Fine & Applied Art.
4. Kala Niketan, Jabalpur: *f.* 1957; *Mgt.* Govt.; *Course* Dip. in Fine & Applied Art.
5. Lxami kla Bhawan, Dhar: *f.* 1939; *Mgt.* Govt.; *Course* Dip. in Drawing & Painting, Dip. in Fine & Applied Art.
6. Mahakoshal Fine Arts College, Raipur: *f.* 1960; *Mgt.* Private; *Course* Dip. in Fine & Applied Art.
7. M.S. Bhand's School of Arts, Gwalior: *f.* 1918; *Mgt.* Private; *Courses* Dip. in Drawing and Painting, Certs. in Drawing and Modeling, Dip. and Advanced Dip. in Fine & Applied Art.

Maharashtra

1. Bandra School of Art, Bombay: *f.* 1965; *Mgt.* Private; *Courses* Elementary and Intermediate Drawing Grade Exam.
2. Film Institute of India, Chiplunkar Road, Poona-4: *f.* 1960; *Mgt.* Govt.; *Courses* Dips. in Art Direction Photography, Sound Engg., Sound Recording, Editing, Acting, Screen play writing.

3. J.J. INSTITUTION OF APPLIED ART, BOMBAY: *f.* 1935; *Mgt.* Govt.; *Courses* Dip. in Commercial Art, Apprentice Training Course Cert. in Commercial Art.
4. J.J. SCHOOL OF ART, BOMBAY: *f.* 1857; *Mgt.* Govt.; *Courses* Dips. in Drawing & Painting, Dip. in Fine Arts & Crafts.

Mysore

1. SRI CHAMARAJENDRA TECHNICAL INSTITUTE, MYSORE: *f.* 1906; *Mgt.* Govt.; *Course* Dip. in Fine Arts.

Orissa

1. GOVERNMENT COLLEGE OF DANCE, DRAMA AND MUSIC, BHUBANESWAR: *f.* 1965; *Mgt.* Govt.; *Courses* Dips. in Dances, Drama and Music.
2. GOVERNMENT SCHOOL OF ARTS & CRAFTS, KHALLIKOTE: *f.* 1957; *Mgt.* Govt.; *Course* Dip. in Arts & Crafts.
3. KALAVIKASH KENDRA, CUTTACK: *f.* 1952; *Mgt.* Private; *Course* Dip. in Classical Music.
4. UTKAL COLLEGE OF MUSIC AND DANCE, NATIONAL MUSIC ASSOCIATION, CUTTACK: *f.* 1953; *Mgt.* Private; *Course* Dip. in Classical Music.
5. VIKRAM DEV ARTS SCHOOL, JEYPORE: *f.* 1965; *Mgt.* Private; *Course* Dip. in Arts & Crafts.

Uttar Pradesh

1. BHATKHANDE (MORRIS) COLLEGE OF HINDUSTANI MUSIC, LUCKNOW: *f.* 1926; *Mgt.* Private; *Courses* Sangeet Visharad, Vadya Visharad, Nritya Visharad, I.M.C. Vocal and Instrumental, I.D.C. (Dance), Sangeet Nipun, Vadya Nipun and Nritya Nipun.
2. KAMBOJ SAPTAKALA NIKETAN, MEERUT: *f.* 1927; *Mgt.* Private; *Courses* Sangeet Prabhakar, Dips. in Mus. (Senior and Junior), Certs. in Acting, Writing, Painting and Demonstration (Senior and Junior).
3. PRAYAG SANGIT SAMITI, ALLAHABAD: *f.* 1926; *Mgt.* Private; *Courses* Sangeet Prabhakar, Sangeet-Shiksha Nipun, Sangeet Pravena, Dips. in Music (Junior and Senior).
4. SANGEET SAMAJ COLLEGE, MEERUT: *f.* 1939; *Mgt.* Private; *Courses* Sangeet Visharad, Nritya Visharad, Vadya Visharad.
5. SANGEET VIDYALAYA, ALMORA: *f.* 1950; *Mgt.* Private; *Courses* Sangeet Prabhakar (Vocal & Instrumental), Senior and Junior Dips. in Mus. (Vocal and Instrumental).

West Bengal

1. ACADEMY OF PHOTOGRAPHY, 1, CHOWRINGHEE ROAD, CALCUTTA: *f.* 1953; *Mgt.* Private; *Course* Dip. in Photography.
2. ARYA SANGEET VIDYAPEETH, 199, SARAT BOSE ROAD, CALCUTTA: *f.* 1941; *Mgt.* Private; *Courses* Sangeet Visharad (Vocal), Vadya Visharad (Instrumental).
3. BENGAL MUSIC COLLEGE FOR GIRLS, 10, DOVER LANE, CALCUTTA: *f.* 1940; *Mgt.* Private; *Courses* Sangeet Visharad (Classical, Vocal), Vadya Visharad (Classical and Instrumental), Geeta Prava (Bengali), Nritya Prava (Dance), Sura Prava (Guitar), Cert. in Mus. [I.M.C.—(i) Classical, Vocal and Instrumental, (ii) Bengali Vocal, Dance and Guitar].
4. BHARTIYA SANGEET MAHAVIDYALAYA (FOR GIRLS), DHAKURIA, CALCUTTA: *f.* 1949; *Mgt.* Private; *Courses* Sangeet Visharad (Vocal), Vadya

Visharad (Instrumental), Nritya Prava (Dance), I.M.C. (Dance, Instrumental and Vocal).

5. **Gita Bitan Shikshayatan, 25-B, Shyama Prasad Mukerjee Road, Calcutta**: *f.* 1941; *Mgt.* Private; *Courses* Gita Bharati (Rabindra Sangit), Sura-Bharati Instrumental (Esraj, Guitar, Sitar and Violin), Nritya Bharati (Dance).
6. **Government College of Art and Craft, 28 Chowringhee Road, Calcutta**: *f.* 1951; *Mgt.* Govt.; *Courses* Dips. in Commercial Art (Applied Art), Drawing and Painting (Life Natural & Murals and Indian Style and Murals), Modeling & Sculpture and Decorative Art.
7. **Hrishikesh Sangeet Vidalaya, Nabadwip (Nadia)**: *f.* 1944; *Mgt.* Private; *Courses* Dips. and Certs. in Vocal Mus., Instrumental Mus. and Dance.
8. **Ram Saran Music College, Vishnupur, Bankura**: *f.* 1946; *Mgt.* Private; *Courses* Dips. in Mus. (Sura Tiratha, Jhankar Tiratha and Sangeet Tiratha).
9. **Sangeet Bharati, 25-B. Shyama Prasad Mukerjee Road, Calcutta**: *f.* 1943; *Mgt.* Private; *Courses* Sangeet Bharati & Sangita Sree.

Chandigarh

1. **Government School of Arts, Chandigarh**: *f.* 1951; *Mgt.* Govt.; *Courses* Dips. in Applied Arts (Iron Work, Jewelry & Enamel, Lacquer Work, Light Metal Work and Wood Work), Drawing & Painting, Clay Modeling & Sculpture and Commercial Art.

Delhi

1. **Delhi Polytechnic, Delhi**: *f.* 1941; *Mgt.* Central Govt.; *Courses* National Dip.. in Applied Art, National Cert. in Commercial Art, Polytechnic Cert. in Art.

Goa

1. **Academia de Musica, Panjim (Goa)**: *f.* 1953; *Mgt.* Govt.; *Courses* Certs. in Solfejo, Singing, Piano, Violin, Cello, Composition (Harmony), Acoustics and Hist. of Music.

Himachal Pradesh

1. **Govt. College of Arts, Nahan**: *f.* 1962; *Mgt.* Govt.; *Courses* Arts and Crafts Teachers Cert., Dips. in Painting & Drawing, Sculpture and Commercial Arts, Dancing and Music (Vocal and Instrumental).

Tripura

1. **Govt. Music College, P. O. Agartala**: *f.* 1964; *Mgt.* Govt.; *Courses* I.M.C. and Visarad in Vocal Sitar, Guitar, Tabla, Sarod, Dance and Esraj.

10. Needle Work

Delhi

1. **Lady Irwin College, New Delhi**: *f.* 1932; *Mgt.* Private; *Course* Dip. in Needle Work.

11. Oriental Learning and Theology

Andhra

1. **Kendriya Sanskrit Vidapeetha, Tirupati**: *f.* 1962; *Mgt.* Govt.; *Courses* Shastri (Shiksha) for Sanskrit Teachers.

Assam

1. Nalbari Sanskrit College, Nalbari: *f.* 1938; *Mgt.* Govt.; *Course* Shastri.

Bihar

1. Govardhan Sahitya Mahavidyalaya, Hindi Vidyapith, Baidyanath, Deoghar: *f.* 1935; *Mgt.* Private; *Courses* Vidya Bhusan, Vidya Ratan.
2. Institute of Post Graduate Studies & Research in Arabic and Persian Learning, P.O. Mahendru (Patna): *f.* 1955; *Mgt.* Govt.; *Courses* Fazil and Kamil.
3. Nava Nalanda Mahavihara, Nalanda (Patna): *f.* 1951; *Mgt.* Govt.; *Course* Pali Acharya.

Gujarat

1. Swadhayaya Mandal, Kila-Pardi (Distt. Suati), *f.* 1918; *Mgt.* Private; *Courses* Sahitya Ratna, Sahitya Acharya, Gita Ratna, Gitalankar, Upnishadalankar, Veda Visharad, Veda Prangat, Vedacharya.

Madhya Pradesh

1. Abhyanand Sanskrit Mahavidyalaya, Kalyanpur (Shahdol): *f.* 1956; *Mgt.* Govt.; *Courses* Madhyama, Shastri.
2. Govt. D.S.V. Sanskrit Mahavidyalaya, Raipur: *f.* 1955; *Mgt.* Govt.; *Courses* Madhyama, Shastri, Acharya.
3. Government Sanskrit College, Gwalior: *f.* 1856; *Mgt.* Govt.; *Courses* Madhyama, Shastri, Acharya.
4. Government Sanskrit College, Indore: *f.* 1876; *Mgt.* Govt.; *Courses* Madhyama, Acharya, Visharad.
5. Government Sanskrit Vidyalaya, Shohawal (Satna): *F.* 1965; *Mgt.* Govt.; *Courses* Madhyama, Shastri, Acharya.
6. Narmada Sanskrit College, Bagalwada (Raisen): *f.* 1965; *Mgt.* Private; *Courses* Madhyama and Shastri.
7. P.T. Sanskrit Degree College, Dhana (Sagar): *f.* 1960; *Mgt.* Private; *Courses* B.A. Classic and H.S.S.B. Course.
8. Sanskrit College, Peelikothi, Chitrakoot: *f.* 1965; *Mgt. Private; Courses* Shastri, Acharya, Ayurved Madhyama.
9. Vanket Sanskrit College, Rewa: *f.* 1912; *Mgt.* Private; *Courses* Madhyama, Shastri, Acharya.

Maharashtra

1. Brahma Karma Vardhini Sanskrit Mahavidyalaya, Nagpur: *f.* 1933; *Mgt.* Private; *Courses* Vyakarana Acharya Shastri, D.O.L., B.O.L.
2. Sanskrit Mahavidyalaya, Jalna: *f.* 1954; *Mgt.* Private; *Courses* Acharya Vyakarna, Shastri Vyakarna, Uttar Madhyama, Poorva Madhyama, Ratna Madhyama, Acharya Teerth, Kavya Teerth, D.O.L., B.O.L.
3. S.K. Mahavidyalaya, Nanded: *f.* 1955; *Mgt.* Private; *Course* Dip. B.O.L.
4. S. R. Sanskrit Mahavidyalaya, Jalna: *f.* 1954; *Mgt.* Private; *Courses* Pravin, Ratna, Teerth, Acharya, D.O.L., B.O.L.

Mysore

1. Maharaja Sanskrit College, Mysore: *f.* 1[illegible]8; *Mgt.* Govt.; *Courses* Vidwat Madhyama, Vidwat Uttama.
2. Sanskrit College, Melukote: *f.* 1854; *Mgt.* Private; *Courses* Vidwat Madhyama, Vidwat Uttama.

3. Sanskrit College, Siddaganga: *f.* 1917; *Mgt.* Private; *Courses* Vidwan (Vidwat Hadhyama and Vidwat Uttama).
4. S. M. S. P. Sanskrit College, Udipi: *f.* 1919; *Mgt.* Private; *Courses* Vidwan, Madhyama and Uttama.
5. Sri Chamarajendra Sanskrit College, Bangalore: *f.* 1894; *Mgt.* Govt.; *Courses* Vidwat Madhyama, Vidwat Uttama.

Orissa

1. Bidyabhushan Sanskrit College, Balangir: *f.* 1948; *Mgt.* Govt.; *Courses* Sastri, Acharya.
2. Evening Sanskrit College, Bhubaneswar: *f.* 1967; *Mgt.* Govt.; *Courses* Madhyama, Bisarad.
3. Parlakimedi Sanskrit College, Parlakimedi: *f.* 1915; *Mfit.* Private; *Courses* Sastri, Acharya.
4. Ramdhin Sanskrit College, Berhampur: *f.* 1959; *Mgt.* Private; *Courses* Sastri, Acharya.
5. Sadasiva, Sanskrit College, Puri: *f.* 1918; *Mgt.* Govt.; *Courses* Sastri, Acharya.

Rajasthan

1. Birla Sanskrit College, Pilani: *f.* 1953; *Mgt.* Private; *Courses* Madhyama, Upadhyaya, Shastri, Acharya.
2. Govt. Sanskrit College, Alwar: *f.* 1935; *Mgt.* Govt.; *Courses* Madhyama, Upadhyay, Shastri, Acharya.
3. Govt. Sanskrit College, Amarsar: *f.* 1948; *Mgt.* Govt.; *Course* Upadhyay.
4. Govt. Sanskrit College, Jodhpur: *f.* 1944; *Mgt.* Govt.; *Course* Upadhyay, Shastri, Archarya.
5. Govt. Sanskrit College, Kaladera: *f.* 1950; *Mgt.* Govt.; *Course* Upadhyay.
6. Govt. Sanskrit College, Mahapura: *f.* 1958; *Mgt.* Govt.; *Course* Upadhyay.
7. Govt. Sanskrit College, Manoharpur: *f.* 1956; *Mgt.* Govt.; *Course* Upadhyay.
8. Govt. Sanskrit College, Sikar: *f.* 1943; *Mgt.* Govt.; *Courses* Upadhyay, Shastri.
9. G. R. Chamariya Sanskrit College, Fatehpur: *f.* 1922; *Mgt.* Private; *Courses* Madhyama, Upadhyay, Shastri, Acharya.
10. Maharaja Sanskrit College, Jaipur: *f.* 1852; *Mgt.* Govt.; *Courses* Madhyama, Upadhyay, Shastri, Acharya.
11. Maharana Sanskrit College, Udaipur: *f.* 1931; *Mgt.* Govt.; *Courses* Upadhyay, Shastri, Acharya.
12. Rishikul Brahmacharyasharam Sanskrit College, Lakshmangarh: *f.* 1923; *Mgt.* Private; *Courses* Upadhyay, Shastri, Achraya, Visharad and Sahitya Ratan (Hindi).
13. Sanskrit College, Nathdwara: *f.* 1905; *Mgt.* Govt.; *Courses* Upadhyay, Shastri, Acharya.
14. Saraswati Vidyapeeth, Kotah: *f.* 1940; *Mgt.* Private; *Courses* Upadhyaya, Shastri, Acharya.
15. Shri Gurukul, Chittorgarh: *f.* 1929; *Mgt.* Private; *Courses* Upadhyay, Shastri, Acharya.

16. Shri Shardul Sanskrit Vidyapith, Bikaner: *f.* 1927; *Mgt.* Private; *Courses* Madhyama, Upadhyay, Shastri, Acharya.
17. Sri Dadu Mahavidyalaya, Jaipur: *f.* 1920; *Mgt.* Private; *Courses* Madhyama, Upadhyay, Shastri, Acharya.
18. Sri Digamber Jain Sanskrit College, Jaipur: *f.* 1895; *Mgt.* Private; *Courses* Madhyama, Shastri, Acharya.
19. Shi Ramanuj Sanskrit College, Didwana: *f.* 1943; *Mgt.* Private; *Courses* Upadhyay, Shastri, Acharya.
20. Sri Vithalnath Sanskrit Mahavidyalaya, Kotah: *f.* 1896; *Mgt.* Private; *Courses* Upadhyay, Shastri, Acharya.

Uttar Pradesh

1. Govt. Oriental College, Rampur: *f.* 1774; *Mgt.* Govt.; *Courses* Darasi Nizami Arabi, Takmil Darasi Hadis, Fazil and Kamil.

West Bengal

1. Calcutta Madrsah, 21 Haji Muhammad Mohsin Square, Calcutta: *f.* 1780; *Mgt.* Govt.; *Courses* Alim, Fazil, Mumtaz-ul-Muhaddethin.
2. Serampore College, Serampore, Hooghly: *f.* 1818; *Mgt.* Private; *Courses* LTh., B.D., M.Th.

Delhi

1. Ramdal Sanskrit Mahavidyalala, Dariba Kalan, Delhi-6: *f.* 1948; *Mgt.* Private; *Course* Shastri.
2. Sanskrit Mahavidyalaya, Arsh Gurukul, Tatesar Jonti, Delhi: *f.* 1944; *Mgt.* Private; *Course* Shastri.
3. Shri Lal Bahadur Shastri National Institute of Sanskrit Studies, 23/3, Shakti Nagar, Delhi-7: *f.* 1962; *Mgt.* Private; *Courses* Shastri, Shiksha Shastri, Navin Acharya and Research Courses.
4. Shri Ram Rishi Sanskrit Mahavidyalaya, Karala (Delhi State): *f.* 1909; *Mgt.* Private; *Courses* Madhyama, Shastri, Acharya.
5. Shri Vishwanath Sanskrit Mahavidyalaya, Vishwanath Ghat, Ashram Marg, Delhi-6: *f.* 1958; *Mgt.* Private; *Courses* Prathma, Madhyama, Uttam Madhyama and Shastri.
6. Vishva Vidya Pratishthana, Rameshnagar, New Delhi-15: *f.* 1966; *Mgt.* Private; *Courses* Shiksha Shastri, Shastri Acharya, Vidya Varidha.

Goa

1. Seminario das Missoes, Pilar (Goa): *f.* 1942; *Mgt.* Private; *Courses* Dip. in Priesthood.
2. Seminario de Rachol, Salsete (Goa): *f.* 1762; *Mgt.* Private; *Course* Dip. in Priesthood.

12. Physical Education

Bihar

1. Govt. College of Health and Physical Education, Patna: *f.* 1951; *Mgt.* Govt.; *Course* Dip. in Physical Educ.
2. Gurukul Vishwa Vidyalaya, Vrindaban, Mathura: *f.* 1957; *Mgt. Course* Cert. in Physical Educ.

Gujarat

1. C. P. Vyayam Mahavidyalaya, Rajpipla (Via Ankleswar), Distt. Broach: *f.* 1949; *Mgt.* Private; *Course* Dip. in Physical Educ.

2. Sheth C. N. Vyayam Vidya Bhavan, Ahmedabad: *f.* 1964; *Mgt.* Private; *Course* Dip. in Physical Educ.

Kerala

1. Govt. College of Physical Education, Trivandrum: *f.* 1954; *Mgt.* Govt.; *Course* Dip. in Physical Educ.
2. Physical Education College, Kozhikode: *f.* 1957; *Mgt.* Govt.; *Course* Dip. in Physical Training.

Madhya Pradesh

1. Tatya Tope State College of Physical Education, Shivpuri: *f.* 1960; *Mgt.* Govt.; *Course* Dip. in Physical Educ.

Madras

1. Y. M. C. A. College of Physical Education, Saidapet, Madras: *f.* 1930; *Mgt.* Private; *Courses* Post-Dip. in Physical Educ., Dip. in Physical Educ. for Women, Higher Grade Cert. in Physical Educ.

Maharashtra

1. G. S. College of Yoga & Cultural Synthesis, Lonavala: *f.* 1950; *Mgt.* Private; *Courses* Dip. in Yoga, Cert. in Yoga.
2. Kareeda Mandal's Narpur Sharirik Shikshan Mahavidyalaya, Vidyanagari Umred Road, Nagpur-3: *f.* 1960; *Mgt.* Private; *Course* Dip. in Physical Educ.
3. Shri Shivaji Sharirik Shikshan College, Amravati: *f.* 1962; *Mgt.* Private; *Course* Dip. in Physical Educ.
4. Training Institute for Physical Education, Kandivali: *f.* 1938; *Mgt.* Govt.; *Course* Dip. in Physical Educ.
5. Training Institute for Physical Education, Nagpur: *f.* 1960; *Mgt.* Private; *Course* Dip. in Physical Educ.
6. Yoga Institute, Santa Cruz (West), Bombay: *f.* 1918; *Mgt.* Govt.; *Course* Cert. in Yoga.

Mysore

1. Govt. College of Physical Education, Kanteerava Stadium, Bangalore: *f.* 1959; *Mgt.* Govt.; *Course* Dip. in Physical Education.

Orissa

1. Govt. College of Physical Education, Cuttack: *f.* 1957; *Mgt.* Govt.; *Course* Cert. in Physical Educ.

Rajasthan

1. Government College of Physical Education, Jodhpur: *f.* 1967; *Mgt.* Govt.; *Courses* Dip. and Cert. in Physical Educ.

Uttar Pradesh

1. Christian College of Physical Education, Lucknow: *f.* 1958; *Mgt.* Private; *Course* Cert. in Physical Educ.
2. Government College of Physical Education for Women, Allahabad: *f.* 1956; *Mgt.* Govt.; *Courses* Dip. and Cert. in Physical Educ.
3. Government College of Physical Education, Rampur: *f.* 1945; *Mgt.* Govt.; *Courses* Dip. in Physical Educ., Cert. in Physical Educ.
4. Shri Gandhi Smarak College of Physical Education, Samodhpur (Jaunpur): *f.* 1954; *Mgt.* Private; *Course* Cert. in Physical Educ.

West Bengal

1. Post-Graduate Training College of Physical Education, Banipur, P. O. Baigachi (24-Parganas): *f.* 1932; *Mgt.* Govt.; *Courses* Dip. in Physical Educ., Cert. in Physical Educ.

13. Rural Institutes

Bihar

1. Rural Institute of Higher Studies, Sundarnagar Birouli, Darbhanga: *f.* 1955; *Mgt.* Govt.; *Course* Dip. in Rural Services.

Gujarat

1. Lok Bharati Lok Seva Mahavidyalaya, Sanosara: *f.* 1953; *Mgt.* Private; *Courses* Dip. in Rural Services, Cert. in Agr. and Lok Shikshan & Agriculture Snatak Course.

Madras

1. Shri Ramakrishna Mission Vidalaya Rural Institute, Sri Ramakrishna Vidyalaya, P.O. Perianaicken-palayam, Coimbatore: *f.* 1956; *Mgt.* Private; *Courses* Dips. in Rural Services and Civil and Rural Engg., Cert. in Agri., Post-Graduate course in Rural Econ. and Cooperation.
2. The Gandhigram Rural Institute, Gandhigram P. O. (Dist. Madurai): *f.* 1956; *Mgt.* Private; *Courses* Dip. in Rural Services, Cert. in Agri., Sanitary Inspectors' Course, Post Dip. Course in Community Development.

Maharashtra

1. Rural Higher Institute, Mouni Vidyapeeth, Gargoti: *f.* 1957; *Mgt.* Private; *Courses* Dips. in Rural Services and Civil & Rural Engg.
2. Rural Institute, Shivajinagar, Amravati: *f.* 1956; *Mgt.* Private; *Courses* Dips. in Rural Services and Civil and Rural Engg., Cert. in Agri.
3. Rural Institute, Wardha: *f.* 1961; *Mgt.* Private; *Courses* Dips. in Rural Services, Civil and Rural Engg., Cert. in Agri.

Mysore

1. Rural Institute, Hanumanamatti: *f.* 1961; *Mgt.* Private; *Courses* Dip. in Rural Services, Cert. in Agri. Sc.

Punjab

1. Kasturba Rural Institute, Rajpura: *f.* 1959; *Mgt.* Private; *Courses* Dip. in Rural Services and Cert. in Agri.

Rajasthan

1. Vidya Bhawan Rural Institute, Udaipur: *f.* 1956; *Mgt.* Private; *Courses* Post Dip. in Community Development, Dips. in Rural Services and Rural and Civil Engg., Sanitary Inspectors' Course, P.G. Courses in Rural Socio. and Community Development.

Uttar Pradesh

1. Balwant Vidyapeeth Rural Institute, Bichpuri, Agra: *f.* 1956; *Mgt.* Private; *Courses* Dips. in Rural Services and Civil and Rural Engg.

Delhi

1. Jamia Rural Institute, Jamia Nagar, New Delhi: *f.* 1956; *Mgt.* Private; *Course* Dips. in Rural Services and in Civil & Rural Engg.

14. Social Science

Maharashtra

1. Bombay Labour Institute, Bombay: *f.* 1947; *Mgt.* Govt.; *Course* Dips. in Labour Welfare and Trade Unionism.
2. Institute of Social Services 38, New Marine Lines, Bombay-1: *f.* 1955; *Mgt.* Private; *Course* Dip. in Social Work.
3. Nirmala Niketan, 38, New Marine Line, Bombay-1: *f.* 1955; *Mgt.* Private; *Course* Dip. in Home Making.
4. Tata Institute of Social Sciences, Sion, Trombay Road, Bombay: *f.* 1936; *Mgt.* Private; *Courses* Dip. in Social Service Administration (Community Organization and Development, Criminology, Juvenile Delinquency & Correctional Administration, Family and Child Welfare, Labour Welfare and Industrial Relations, Medical and Psychiatric Social Work, Rural Welfare Social Research and Tribal Welfare, Certs. in Applied Psychology, Social Research and Tribal Welfare.

Orissa

1. Social Education Organiser's Training Centre, Laxmisagar, Bhubaneswar-1: 1957; *Mgt.* Govt.; *Course* Cert. in Social Educ.

West Bengal

1. The Indian Institute of Social Welfare and Business, Management, College Square, Calcutta: *f.* 1953; *Mgt.* Private; *Course* Dip. in General Social Welfare.

15. Statistics

Andhra

1. The Indian Institute of Economics, Himayatnagar, Hyderabad: *f.* 1961; *Mgt.* Govt.; *Course* Cert. in Statistics.

Delhi

1. Statistical Branch of Indian Council of Agricultural Research, New Delhi: *f.* 1945; *Mgt.* Central Govt.; *Courses* Dip. in Agri. Stat., Cert. in Agri. Stat., Statistician Cert. Course in Agri., Stat., MSc., Ph.D.

16. Teachers' Training

Andhra

1. Central Institute of English, Hyderabad-7: *f.* 1958; *Mgt.* Board of Governors; *Course* Post-Graduate Dip. in Teaching of English.

Assam

1. Post-Graduate Training College, Jorhat: *f.* 1957; *Mgt.* Govt.; *Course* Dip. in T.T.

Bihar

1. Teachers' Training College, Bhagalpur: *f.* 1954; *Mgt.* Govt.; *Course* Dip. in Education.

2. Teachers' Training College, Ranchi: *f.* 1955; *Mgt.* Govt.; *Course* Dip. in Education.
3. Teachers' Training College, Turki: *f.* 1951; *Mgt.* Govt.; *Course* Dip. in Education.

Chandigarh

1. Central Crafts Institute for Women, Chandigarh: *f.* 1948; *Mgt.* Govt.; *Course* Craft Teachers' Training Cer.
2. Govt. School of Arts, Chandigarh: *f.* 1951; *Mgt.* Govt.; *Courses* Art and Craft Teachers' Cert., Art Masters' Cert., Craft Masters' Cert.

Gujarat

1. Graduate Basic Training Centre, Porbandar: *f.* 1954; *Mgt.* Govt.; *Course* Dip. in Basic Education.
2. Graduate Basic Training Centre, Rajipal (Distt. Broach): *f.* 1948; *Mgt.* Govt.; *Course* Dip. in Basic Education.
3. Sheth C. N. Graduate Basic Training Centre, Ahmedabad: *f.* 1964; *Mgt.* Private; *Course* Dip. in Basic Educ.

Haryana

1. Ahir College, Rewari: *f.* 1945; *Mgt.* Private; *Course* Arts & Crafts T. T. C.
2. D.A.V. High & Training School, Mohana (Rohtak): *Mgt.* Private; *Course* Arts & Crafts T. T. C.
3. Government Industrial School for Girls, Rohtak: *f.* 1946; *Mgt.* Govt.; *Course* T. T. C.
4. Janta High and Training School, Butana, Rohtak: *f.* 1955; *Mgt.* Private; *Course* Art and Craft T. T. C.
5. Margaret Irvin Govt. Industrial School for Girls, Ambala: *f.* 1939; *Mgt.* Govt.; *Course* Craft T. T. C.

Maharashtra

1. Acharya Jawadekar Vidya Bhawan, Gargoti (Distt. Kolhapur): *f.* 1956; *Mgt.* Private; *Course* B.Ed. (Basic).
2. Gandharwa Mahavidyalaya Mandal, Poona: *f.* 1931; *Mgt.* Private; *Courses* Sangeet Shikshak Sanad, Sangeet Shikshak Visharad and Sangeet Shikshak Parangat.
3. Graduate Basic Training Centre, Dhulia (Distt. West Khandesh): *f.* 1948; *Mgt.* Govt.; *Course* Dip. in Basic Education.
4. Graduate Basic Training College, Gargoti: *f.* 1956; *Mgt.* Govt.; *Course* B.Ed. (Basic).
5. Institute of Vocational Guidance and Selection, 3, Cruikshank Road, Bombay-1: *f.* 1950; *Mgt.* Govt.; *Course* Dip. in Vocational Guidance, Career Master's Cert.
6. Nai Talim Bhawan, Sevagram (Wardha): *f.* 1938; *Mgt.* Private; *Course* Dip. in Basic Education.

Mysore

1. Graduate Basic Training College Dharwar: *f.* 1948; *Mgt.* Govt.; *Course* Dip. in Basic Education.
2. Regional Institute of English, Bangalore: *f.* 1963; *Mgt.* Private; *Courses* Cert. in Methods of Teaching English in Elementary Schools.

Orissa

1. Basic Training School, Angul: *f.* 1947; *Mgt.* Govt.; *Course* Basic Training Cert.
2. Basic Training School, Bargarh, Sambalpur: *f.* 1948; *Mgt.* Govt.; *Course* Basic Training Cert.
3. Basic Training School, Bhahjnagar (Ganjam): *f.* 1948; *Mgt.* Govt.; *Course* Basic Training Cert.
4. Basic Training School, Nawrangpur (Koraput): *f.* 1948; *Mgt.* Govt.; *Course* Basic Training Cert.
5. Basic Training School, Raj Sunakhala, Puri: *f.* 1949; *Mgt.* Govt.; *Course* Basic Training Cert.
6. Basic Training School, Tudigadia, Balasore: *f.* 1949; *Mgt.* Govt.; *Course* Basic Training Cert.
7. Govt. Secondary Training School, Chikiti (Ganjam): *f.* 1925; *Mgt.* Govt.; *Course* C.T.
8. Secondary Training School, Agarpada (Balasore): *f.* 1961; *Mgt.* Govt.; *Course* C.T.
9. Secondary Training School, Athgarh: *f.* 1966; *Mgt.* Govt.; *Course* C.T.
10. Secondary Training School, Bacudi: *f.* 1966; *Mgt.* Govt.; *Course* C.T.
11. Secondary Training School, Balangir: *f.* 1966; *Mgt.* Govt.; *Course* C.T.
12. Secondary Training School, Baripada: *f.* 1961; *Mgt.* Govt.; *Course* C.T.
13. Secondary Training School, Bhalulata: *f.* 1964; *Mgt.* Govt.; *Course* C.T.
14. Secondary Training School, Bhawanipatna: *f.* 1961; *Mgt.* Govt.; *Course* C.T.
15. Secondary Training School, Cuttack: *f.* 1869; *Mgt.* Govt.; *Course* C.T.
16. Secondary Training School, Deogarh: *f.* 1966; *Mgt.* Govt.; *Course* C.T.
17. Secondary Training School for Women, Cuttack: *f.* 1960; *Mgt.* Govt.; *Course* C.T.
18. Secondary Training School for Women, Sambalpur: *f.* 1962; *Mgt.* Govt.; *Course* C.T.
19. Secondary Training School, Jeypore: *f.* 1966; *Mgt.* Govt.; *Course* C.T.
20. Secondary Training School, Keonjhar: *f.* 1964; *Mgt.* Govt.; *Course* C.T.
21. Secondary Training School, Khalikote: *f.* 1966; *Mgt.* Govt.; *Course* C.T.
22. Secondary Training School, Khurda: *f.* 1966; *Mgt.* Govt.; *Course* C.T.
23. Secondary Training School, Kundukela (Sundargarh): *f.* 1959; *Mgt.* Govt.; *Course* C.T.
24. Secondary Training School, Langaleswar: *f.* 1966; *Mgt.* Govt.; *Course* C.T.
25. Secondary Training School, Nimapara: *f.* 1966; *Mgt.* Govt.; *Course* C.T.
26. Secondary Training School, Polsora: *f.* 1956; *Mgt.* Govt.; *Course* C.T.
27. Secondary Training School, Puri: *f.* 1964; *Mgt.* Govt.; *Course* C.T.
28. Secondary Training School, Rahama (Cuttack): *f.* 1966; *Mgt.* Govt.; *Course* C.T.
29. Secondary Training School, Rangagola: *f.* 1966; *Mgt.* Govt.; *Course* C.T.
30. Thumpsion Women's Training Institution, Cuttack: *f.* 1965; *Mgt.* Private; *Course* C.T

Punjab

1. D.A.V. High School, Dera Bassi (Patiala): *Mgt.* Private; *Course* Arts & Crafts Teachers' Cert.
2. Dayanand Training Institute, Nawanshahr, Doaba: *f.* 1955; *Mgt.* Private; *Courses* Art and Craft Teachers' Cert.
3. Gandhi Arya High School, Barnala: *Mgt.* Private; *Course* Arts & Crafts Teachers' Cert.
4. Govt. Arts & Crafts Teacher's Training School, Nabha: *f.* 1962; *Mgt.* Govt.; *Course* Art & Crafts Teachers' Cert.
5. Govt. Industrial School for Girls, Amritsar: *f.* 1946; *Mgt.* Govt.; *Course* Craft Teachers' Training Cert.
6. Govt. Industrial School for Girls, Jullundur: *f.* 1945; *Mgt.* Govt.; *Course* Craft Teachers' Training Cert.
7. Mehar Chand Technical Institute, Jullundur: *f.* 1945; *Mgt.* Private; *Course* Art and Craft Teachers' Cert.
8. Ramgarhia Training College, Phagwara: *f.* 1956; *Mgt.* Private; *Course* Arts and Crafts Teachers' Cert.
9. S.G. Ravi Dass Basic Training School for Girls, Jullundur:*f.* 1962; *Mgt.* Private; *Course* Arts & Crafts Teachers' Cert.
10. S.I.S.High & Basic Training School, Verka, Amritsar: *Mgt.* Private; *Course* Arts & Crafts Teachers' Cert.
11. Tara Karan S.D. Technical Institute, Baijnath (Kangra): *f.* 1953; *Mgt.* Private; *Course* Arts & Crafts Teachers' Cert.
12. Vidya Sahayak Sabha, Jullundur: *Mgt.* Private; *Course* Arts & Crafts Teachers' Cert.

Uttar Pradesh

1. Christian Training College, Lucknow: *f.* 1949 (L.T. Class); *Mgt.* Private; *Course* L.T.
2. City Montessorie School, Lucknow: *f.* 1965; *Mgt.* Private; *Course* C.T. (Nursery).
3. Government Basic Training College, Varanasi: *f.* 1939; *Mgt.* Govt.; *Course* L.T. (Basic).
4. Government College of Arts and Crafts, Lucknow: *f.* 1912; *Mgt.* Govt.; *Course* Drawing Teachers' Training Cert.
5. Government College of Home Science for Women, Allahabad: *f.* 1948; *Mgt.* Govt.; *Course* L.T. (Home Sc.).
6. Government Constructive Training College, Lucknow: *f.* 1948; *Mgt.* Govt.; *Course* L.T. (Constructive).
7. Government Junior Basic Training College, Jhansi: *f.* 1954; *Mgt.* Govt.; *Course* C.T. (Basic).
8. Government Junior Basic Training College, Lucknow: *f.* 1954; *Mgt.* Govt.; *Course* C.T. (Basic).
9. Government Junior Basic Training College, Baghra, Muzaffarnagar: *f.* 1954; *Mgt.* Govt.; *Course* C.T. (Basic).
10. Government Nursery Training College, Allahahbad: *f* 1952; *Mgt.* Govt.; *Course* C.T. (Nursery).
11. Government Nursery Training College for Women, Agra: *f.* 1965; *Mgt.* Govt.; *Course* C.T.
12. Government (Central) Pedagogical Institute, Allahabad: *f.* 1948; *Mgt.* Govt.; *Course* L.T.

13. Government Training College for Women, Allahabad: *f.* 1948; *Mgt.* Govt.; *Course* L.T.
14. Government Training College for Women, Lucknow: *f.* 1945; *Mgt.* Govt.; *Course* C.T.
15. Government Training College for Women, Modinagar, Meerut: *f.* 1965; *Mgt.* Govt.; *Course* C.T.
16. Government Wood Working Institute, Allahabad: *f.* 1918; *Mgt.* Govt.; *Course* Dip. in T.T.C. (Wood Work).
17. J.L.N. Teachers Training College, Firozabad, Agra: *f.* 1965; *Mgt.* Private; *Course* C.T.
18. Kishori Raman Training College, Mathura†: *f.* 1948 (L.T. Class); *Mgt.* Private; *Course* L.T.
19. K.P. Training College, Allahabad: *f.* 1951; *Mgt.* Private; *Course* L.T.
20. Lal Bagh Girl's H.S. School (Nursery Classes), Lucknow: *f.* 1956; *Mgt.* Private; *Course* C.T. (Nursery).
21. Queen Victoria Training Institute for Women, Agra†: *f.* 1923; *Mgt.* Private; *Course* C.T.
22. St. Mary's Convent Training College, Allahabad: *f.* 1950; *Mgt.* Private; *Course* Kindergarten and Junior School Teachers' Cert., Secondary School Teachers' Cert.
23. Training College for Teachers for Schools for Deaf, Lucknow: *f.* 1948; *Mgt.* Private; *Course* C.T.
24. United Church of Northern India Training Institute for Women, Dehra Dun: *f.* 1954; *Mgt.* Private; *Course* C.T.

West Bengal

1. Chittaranjan Teachers' Training Institute, 6, Nafar Kundu Road, Calcutta: *f.* 1958; *Mgt.* Private; *Course* Under-graduate T.T.C.
2. Gokhale Memorial Girls' College 1/1, Harish Mukherjee Road, Calcutta: *f.* 1938; *Mgt.* Private; *Course* Under-graduate T.T.C.
3. Govt. College of Arts and Crafts, 28, Chowringhee Road, Calcutta: *f.* 1951; *Mgt.* Govt.; *Course* Dip. in Teaching (Decorative Art & Craft).
4. Govt. Hindi Teachers Training College, 20, Jadulal Mallick Road, Calcutta-6: *f.* 1964; *Mgt.* Govt.; *Course* Cert. in Hindi Training.
5. Institution for the Training of Music Teachers (Women), P-398/1, Keyatala Lane, Calcutta: *f.* 1957; *Mgt.* Private; *Course* T.T.Dip. in Music.
6. Loreto College, 7, Middleton Row, Calcutta: *f.* 1912; *Mgt.* Private; *Course* Undergraduate T.T.C.
7. Post-Graduate Basic Training College, Banipur (24-Parganas): *f.* 1948; *Mgt.* Govt.; *Course* Dip. in Basic Educ.
8. Post-Graduate Basic Training College, Rahara (24 - Parganas): *f.* 1961; *Mgt.* Private; *Course* Dip. in Basic Educ.
9. Saktigarh Senior Basic Training College, Barsul (Burdwan): *f.* 1958; *Mgt.* Private; *Course* Cert. in Senior Basic Training.
10. Senior Basic Training College Mahammadbazar (Birbhum): *f.* 1957; *Mgt.* Private; *Course* Cert. in Senior Basic Training.
11. Shree Ramakrishna Senior Basic Training College, Darjeeling: *f.* 1957; *Mgt.* Private; *Course* Cert. in Senior Basic Training.
12. Sponsored Senior Basic Training College for Women, 98, Beltola

ROAD, CALCUTTA: *f.* 1961; *Mgt.* Private; *Course* Cert. in Senior Basic Training.

13. ST. THOMAS UNDER-GRADUATE TEACHERS' TRAINING COLLEGE, 4, DIAMOND HARBOUR ROAD, KHIDERPORE, CALCUTTA-23: *f.* 1964; *Mgt.* Private; *Course* Under-graduate T.T. Cert.

Chandigarh

1. CENTRAL CRAFTS INSTITUTE FOR WOMEN, CHANDIGARH: *f.* 1948; *Mgt.* Govt.; *Course* Crafts Teachers' Training Cert.
2. GOVERNMENT SCHOOL OF ARTS, CHANDIGARH: *f.* 1951; *Mgt.* Govt.; *Courses* Arts and Crafts Teachers' Training Cert., Art Master's Cert., Craft Master's Cert.

Delhi

1. GOVT. TEACHERS' TRAINING INSTITUTE FOR MEN, ALIPUR, DELHI: *f.* 1964; *Mgt.* Govt.; *Course* J.B.T. Cert..
2. GOVT. CO-EDUCATIONAL TEACHERS' TRAINING INSTITUTE, DARYAGANJ, DELHI: *f.* 1948; *Mgt.* Govt.; *Course* Teachers' Trg. in Elementary Educ.
3. LADY IRWIN COLLEGE, NEW DELHI: *f.* 1932; *Mgt.* Private; *Course* Teachers' Dip. in Home Sc.
4. TEACHER'S COLLEGE, JAMIA MILLIA ISLAMIA, JAMIA NAGAR, NEW DELHI-25: *f.* 1938; *Mgt.* Private; *Course* Dips. in Basic Trg. and in Teaching of Arts and Crafts.

Goa

1. ESCOLE NORMAL DE LUIS DE CAMOES, PANJIM: *f.* 1856; *Mgt.* Govt.; *Course* Dip. in Teachers' Training.

Manipur

1. BASIC TRAINING COLLEGE, IMPHAL: *f.* 1961; *Mgt.* Govt.; *Course* Diploma in Teaching (Basic).

Himachal Pradesh

1. TRAINING COLLEGE, SOLAN: *f.* 1955; *Mgt.* Govt.; *Course* Teachers' Diploma in Home Science.

Pondicherry

1. CENTRE PEDAGOGIQUE, KARIKAL: *f.* 1961; *Mgt.* Govt.; *Course* Secondary Grade Basic T.T.C.
2. CENTRE PEDAGOGIQUE, PONDICHERRY: *f.* 1955; *Mgt.* Govt.; *Course* Secondary Grade Non-Basic T.T.C.

Tripura

1. BASIC TRAINING COLLEGE, KAKRABAN P.O.: *f.* 1959; *Mgt.* Govt.; *Course* P.G. Dip. in Basic Teachers' Training.
2. BASIC TRAINING COLLEGE, PANISAGAR: *f.* 1960; *Mgt.* Govt.; *Course* P.G. Dip. in Basic Teachers' Training.
3. BASIC TRAINING COLLEGE, AGARTALA: *f.* 1954; *Mgt.* Govt.; *Course* Post-Graduate Dip. in Basic Teachers' Training.
4. CRAFT TEACHERS' TRAINING INSTITUTE, AGARTALA: *f.* 1958; *Mgt.* Govt.; *Course* Cert. in Craft Teachers' Training.
5. HINDI TEACHERS' TRAINING COLLEGE, AGARTALA: *f.* 1956; *Mgt.* Govt.; *Course* Dip. in Hindi Teachers' Trg.

17.—Veterinary Science

Assam

1. ASSAM VETERINARY COLLEGE, GAUHATI: *f.* 1948; *Mgt.* Govt.; *Course* Dip. in Vet. Sc. and A.H.
2. VETERINARY FIELD ASSISTANTS' INSTITUTE, GHOONGOOR, CACHAR: *f.* 1958; *Mgt.* Govt.; *Course* V.F.A.

Maharashtra

1. TRAINING CENTRE IN SHEEP & WOOL PRODUCTION, POONA-16: *f.* 1962; *Mgt.* Govt.; *Course* Dip. in Sheep and Wool Production.

Uttar Pradesh

1. INDIAN VETERINARY RESEARCH INSTITUTE, IZATNAGAR: *f.* 1922; *Mgt.* Central Govt.; *Courses* Associateship of I.V.R.I., National Diploma in Animal Gynecology, Animal Husbandry, Poultry, Husbandry and Preventive Veterinary Medicine; Course in the Technique of Manufacture of Biological Products.
2. INDIAN VETERINARY RESEARCH INSTITUTE, MUKTESHWAR: *f.* 1893; *Mgt.* Central Govt.; *Courses* Associateship of I.V.R.I., Certs. in Advanced Course in Animal Husbandry and Manufacture of Sera & Vaccines, Post-Graduate Refresher Course in Vet. Sc.

APPENDIX G

Polytechnics, Technical Schools, and Rural Institutes

The information and data in this appendix are based on **Facilities for Technical Education in India.** Ministry of Education, Government of India, 1965. This appendix has been designed especially for use with the Admission and Placement Recommendations in Chapter IX.

Polytechnics

ANDHRA PRADESH

Anantapur	Government Polytechnic
Gudur	Government Ceramic Institute
	Government Mining Institute
Guntur	M.B.T.S. Government Polytechnic
Hyderabad	Government Polytechnic
	Girls' Polytechnic
	The Hyderabad Polytechnic
Kakinada	Andhra Polytechnic
	Government Polytechnic for Girls
Kothagudem	Government Mining Institute
Mahboobnagar	Government Polytechnic
Nandyal	Sri Epuri Seshiah Chetty Government Polytechnic
Nellore	Government Polytechnic
Nizamabad	Government Polytechnic
Proddatur	Government Polytechnic
Srikakulam	Government Polytechnic
Tanuku	Sree Mullapudi Venkataraya Memorial Polytechnic
Tirupati	Sri Venkateswara Government Polytechnic
Vijayawada	Government Polytechnic
Vishakhapatnam	Government Polytechnic
Wanaparthy	The Krishnadevaraya Polytechnic
Warangal	Government Polytechnic

ASSAM

Gauhati	Assam Engineering Institute
Jorhat	H.R.H. The Prince of Wales Institute of Engineering and Technology
Nowgong	Nowgong Polytechnic
Silchar	Government Polytechnic

BIHAR

Bhaga	Bhaga Mining School
Bhagalpur	Bhagalpur School of Engineering
Darbhanga	Darbhanga School of Engineering
Dhanbad	Dhanbad Polytechnic
Gaya	Gaya School of Engineering
Jharia	Mining Institute

Kodarma	Mining Institute
Muzaffarpur	Tirhut School of Engineering
Patna	Patna Polytechnic
	Patna School of Engineering
Purnea	Purnea School of Engineering
Ranchi	Ranchi School of Engineering

DELHI

New Delhi	G. B. Pant Polytechnic
	Pusa Polytechnic, Pusa
	Women's Polytechnic

GOA

Panjim	Government Polytechnic

GUJARAT

Adipur	Gandhidham Polytechnic
Ahmedabad	Government Polytechnic
Baroda	Faculty of Technology and Engineering, M. S. University
	Polytechnic, M. S. University
Bhavnagar	Sir Bhavsinhji Polytechnic Institute
Broach	Shri Krishnalal Jhaveri Polytechnic
Dohad	Government Polytechnic
Morvi	Lukhdhirji Engineering College
Patan	Kilachand Devehand Polytechnic
Porbandar	Government Polytechnic
Rajkot	Shri A. V. Parekh Technical Institute
Saraspur	R. C. Technical Institute
Surat	Dr. S. & S. S. Gandhy College of Engineering & Technology
Vallabh Vidyanagar	Bhailalbhai & Bhikhabhai Polytechnic

HIMACHAL PRADESH

Sundernagar	Government Polytechnic

JAMMU & KASHMIR

Jammu	Government Polytechnic
Srinagar	Kashmir Government Polytechnic

KERALA

Alagappanagar	Thiagarajar Polytechnic
Alleppey	Carmel Polytechnic
Cannanore	Government Polytechnic
Kalamassery	Government Polytechnic
Kottayam	Government Polytechnic
Kottiyam	Sri Narayana Polytechnic
Kozhikode	Kerala Government Polytechnic
	Women's Polytechnic

Pandalam	N.S.S. Polytechnic
Perinthalamanna	Government Polytechnic
Tirur	Seethi Sahib Memorial Polytechnic
Trichur	Maharaia's Technological Institute Women's Polytechnic
Trivandrum	Central Polytechnic Institute of Textile Technology Women's Polytechnic
Valapad	Sri Rama Polytechnic

MADHYA PRADESH

Balaghat	Polytechnic, Balaghat
Bhopal	Sardar Vallabhbhai Government Polytechnic, Bhopal Women's Polytechnic
Chhindwara	Government Mining Polytechnic
Dhamtari	Dhamtari Polytechnic
Durg	Government Polytechnic
Gwalior	Government Central Technical Institute
Harda	Polytechnic, Harda
Indore	Shri Vaishnav Polytechnic
Jabalpur	Government Polytechnic Kala Niketan
Jaora	Govindram Todi Government Polytechnic
Khandwa	Government Polytechnic
Khurai	Polytechnic Institute
Morar	Leather Technological Institute
Nowgong	Government Polytechnic
Raigarh	Kirodimal Government Polytechnic
Shahdol	Government Mining Polytechnic
Ujjain	Government Polytechnic
Vidisha	Samrat Ashok Technological Institute

MADRAS

Annamalainagar	Muthiah Polytechnic
Avadi	Murugappa Chettiar Memorial Polytechnic
Chettinad	Annamalai Polytechnic
Coimbatore	Coimbatore Institute of Technology Government Polytechnic P.S.G. Polytechnic, Peelamedu
Gudiyattam	Rajagopal Polytechnic
Kancheepuram	Bhaktavatsalam Polytechnic
Karaikudi	Alagappa Polytechnic
Madras	Central Polytechnic, Adyar C. N. T. Institute, Vepery Government Polytechnic for Women

	Institute of Leather Technology, Canal Road, Adyar
	Ramakrishna Mission Technical Institute
	Regional School of Printing
Madurai	Government Girls Polytechnic
	Tamilnad Polytechnic
Nagapattinam	Valivalam Desikar Polytechnic
Nagercoil	Government Polytechnic
Pollachi	Nachimuthu Polytechnic
Puttur	Srinivasa Subbaraya Polytechnic
Rajapalayam	P.A.C. Ramasamy Raja Polytechnic
Salem	Thiagarajar Polytechnic
Sankarnagar	Sankar Institute of Polytechnic
Tiruchirapalli	The Seshasayee Institute of Technology
	Government Polytechnic, Thoovakudi
Tuticorin	Government Polytechnic
Vellore	Government Polytechnic
Vriudhunagar	Virudhunagar S. Vellaichamy Nadar Polytechnic

MAHARASHTRA

Amravati	Government Polytechnic
Aurangabad	Government Polytechnic
Bombay	Government Leather Working School
	Government Polytechnic
	Government Training Institute
	K. J. Somaiya Polytechnic
	M. H. Saboo Siddik Polytechnic
	School of Printing Technology
	Sir J. J. College of Architecture
	Sri Vile Parle Kalavani Mandal's Shri Baghubhai Mafatlal Polytechnic
	St. Xavier's Technical Institute
	Victoria Jubilee Technical Institute
Dhulia	Government Polytechnic
Jalgaon	Government Polytechnic
Karad	Government Polytechnic
Khamgaon	Government Polytechnic
Kolhapur	Government Polytechnic
Nagpur	Government Mining Polytechnic
	Government Polytechnic
Poona	Cusrow Wadia Institute of Technology
	D. E. Society's Technical Institute
	Government Polytechnic
Ratnagiri	Government Polytechnic

Sangli	Walchand College of Engineering
Satur	P. L. Government Polytechnic
Sholapur	Government Polytechnic

MANIPUR

Imphal	Adimjati Technical Institute

MYSORE

Bagalkot	Basaveshvar Vidya Vardhak Sangha's Polytechnic
Bangalore	Archarya Pathashala Polytechnic Government Polytechnic for Women M.E.I. Polytechnic Shri Jayachamarajendra Polytechnic Shri Krishnarajendra Silver Jubilee Technological Institute
Belgaum	Government Polytechnic
Bellary	Government Polytechnic
Bhadravati	The Mysore Iron and Steel Silver Jubilee Polytechnic
Bidar	Government Polytechnic
Bijapur	Government Polytechnic
Channapatna	Government Polytechnic
Chikmagalur	D.A.C.G. Polytechnic
Chintamani	Government Polytechnic
Davangere	D.R.R. Polytechnic
Dharwar	K. H. Kabbur Institute of Engineering
Gulbarga	Government Polytechnic
Hassan	Smt. L.V. Polytechnic
Hubli	B. V. Bhoomraddi College of Engineering & Technology
Karwar	Government Polytechnic
Khushalnagar	Government Polytechnic
Krishnarajpet	Government Polytechnic
Mandya	P.E.S. Polytechnic
Mangalore	Karnataka Polytechnic
Mysore	C.P.C. Polytechnic National Institute of Engineering
Oorgaum	School of Mines
Raichur	Government Polytechnic
Tumkur	Government Polytechnic

ORISSA

Berhampur	Berhampur Engineering School
Bhadrak	School of Engineering
Cuttack	Orissa School of Engineering
Jharsuguda	Jharsaguda Engineering School
Kendrapara	Kendrapara Engineering School
Keonjharghar	Orissa School of Mining Engineering

Rourkela	Composite Polytechnic

PONDICHERRY

Pondicherry	Motilal Nehru Polytechnic

PUNJAB

Ambala	Government Polytechnic
Amritsar	Punjab Institute of Textile Technology
Baijnath	S.D. Polytechnic
Chandigarh	Central Polytechnic Government Polytechnic for Women Punjab Engineering College
Guru Tegh Bahadurgarh	Government Polytechnic
Hamirpur	Government Polytechnic
Hoshiarpur	Jagatram Government Polytechnic
Jhajjar	Government Polytechnic
Jullundur	Government Tanning Institute Mehar Chand Polytechnic
Ludhiana	Guru Nanak Engineering College Vishvakarma Institute of Engineering Technology
Nilokheri	Punjab Polytechnic
Patiala	Thapar Polytechnic
Phagwara	Ramgarhia Polytechnic
Rohtak	Chhotu Ram Polytechnic Vash Technical Institute
Sirsa	Government Polytechnic

RAJASTHAN

Ajmer	Ajmer Polytechnic
Alwar	Alwar Polytechnic
Bikaner	Bikaner Polytechnic
Jodhpur	Jodhpur Polytechnic
Kota	Government Polytechnic
Udaipur	Udaipur Polytechnic

TRIPURA

Narsingarh	Polytechnic Institute

UTTAR PRADESH

Agra	Government Leather Institute Technical College, Dayalbagh
Allahabad	Allahabad Polytechnic Handia Polytechnic Northern Regional School of Printing Technology
Aligarh	University Polytechnic
Azamgarh	Government Polytechnic
Ballia	Town Polytechnic

Baraut	D. Jain Polytechnic
Bareilly	Government Polytechnic
Chandauli	Chandauli Polytechnic
Faizabad	Government Polytechnic
Gorakhpur	Maharana Pratap Polytechnic
Hathras	Murlidhar Gajanand Polytechnic
Jatepur	Government Polytechnic
Jhansi	Government Polytechnic
Kanpur	Government Central Textile Institute Government Leather Institute Government Polytechnic National Sugar Institute
Khurja	Seth Ganga Sagar Jatia Government Polytechnic
Lucknow	Government Girls' Polytechnic Government Polytechnic Lucknow Polytechnic Hewett Polytechnic
Mathura	P.M.V. Polytechnic
Meerut	D.N. Polytechnic
Muzaffarnagar	Gandhi Polytechnic
Nainital	Nainital Polytechnic
Roorkee	Kanahiyalal Polytechnic Roorkee University

WEST BENGAL

Asansol	Asausol Polytechnic, Dhadka
Belgharia	Ramakrishna Mission Shilapapitha
Belurmath	Ramakrishna Mission Shilpamandira
Bishnupur	K.G. Engineering Institute
Burdwan	B.C. Institute of Engineering and Technology
Calcutta	Acharya Prafulla Chandra Ray Polytechnic Birla Institute of Technology Calcutta Technical School Central Calcutta Polytechnic College of Ceramic Technology Institute of Jute Technology Jnan Chandra Ghosh Polytechnic North Calcutta Polytechnic The Directorate of Marine Engineering Training The School of Printing Technology Women's Polytechnic
Cossimbazar Raj	Murshidabad Institute of Technology
Debalaya	Jagadish Chandra Polytechnic
Hooghly	Hooghly Institute of Technology

Jalpaiguri	Jalpaiguri Polytechnic Institute
Krishnagar	B.P.C. Institute of Technology
Malda	Malda Polytechnic
Midnapore	Jhargram Polytechnic
Purulia	Purulia Polytechnic
Suri	Shree Ramkrishna Silpa Vidyapith

Technical Schools

Certificate Courses

ANDHRA PRADESH

Kakinada	Junior Technical School
Secunderabad	Government Junior Technical School
Tirupati	Junior Technical School
Vijayawada	Junior Technical School
Warangal	Government Junior Technical School

BIHAR

Hazaribagh	Junior Technical School
Muzaffarpur	Junior Technical School
Patna	Junior Technical School

DELHI

Delhi	Secondary Technical School
New Delhi	Secondary Technical School Badarpur

GUJARAT

Vallabh Vidyanagar	I. B. Patel Junior Technical School

KERALA

Adur	Government Junior Technical School
Attingal	Junior Technical School
Calicut	Junior Technical School
Cannanore	Junior Technical School
Cheruvathur	Junior Technical School
Chittur	Junior Technical School
Cranganore	Junior Technical School
Ezhukone	Junior Technical School
Koratty	Junior Technical School
Kottayam	Junior Technical School
Krishnapuram	Junior Technical School
Kunnamkulam	Junior Technical School
Manjeri	Junior Technical School
Mattanur	Government Junior Technical School
Nedumangad	Junior Technical School
Palai	Junior Technical School
Perumbavoor	Junior Technical School
Shertallai	Junior Technical School
Shoranur	Junior Technical School
Trichur	Junior Technical School

MADHYA PRADESH

Chhindwara	Government Junior Technical School
Dhar	Government Junior Technical School
Gwalior	Government Junior Technical School
Jabalpur	Government Junior Technical School
Khairagarh	Government Junior Technical School
Khandwa	Government Junior Technical School
Panna	Government Junior Technical School
Raigarh	Government Junior Technical School
Raipur	Government Junior Technical School
Sagar	Government Junior Technical School
Satna	Government Junior Technical School
Sehore	Government Junior Technical School
Shahdol	Government Junior Technical School
Tikamgarh	Government Junior Technical School

MADRAS

Chettinad	Junior Technical School
Coimbatore	Junior Technical School
Madras	Junior Technical School
Madurai	Junior Technical School
Nagercoil	Junior Technical School
Pollachi	Junior Technical School
Sankarnagar	Junior Technical School
Thoovakudi	Junior Technical School
Tiruchirapalli	Junior Technical School
Vellore	Junior Technical School

MAHARASHTRA

Bombay	Mahatma Phule Junior Technical High School

PUNJAB

Gurgaon	Government Junior Technical School
Kangra	Government Junior Technical School
Kapurthala	Government Junior Technical School

UTTAR PRADESH

Allahabad	Government Secondary Technical School
Daurala	C.M.S. Government Secondary Technical School
Ghazipur	Secondary Training School
Jaunpur	Government Secondary Technical School
Jhansi	Government Secondary Technical School

WEST BENGAL

Asansol	St. Vincent's Junior Technical School
Basanti	St. Xavier's Junior Technical School
Belurmath	Ramakrishna Mission Shilpayatana Junior Technical School
Burdwan	Satischandra Silpavidyalay
Chhota Jagulia	Chhota Jagulia Junior Technical School
Durgi	Sarju Prasad Junior Engineering Institute
Hooghly	Hooghly Junior Technical School
Jalpaiguri	Junior Technical School
Krishnagar	B.P.C. Junior Technical School
Rahara	Ramakrishna Mission Boys Home J. T. School
Sevayatan	Sevayatan Silpa Vidyalaya

RURAL INSTITUTES

DELHI

New Delhi	Jamia Rural Institute

MADRAS

Coimbatore	Shri Ramakrishna Mission Vidyalaya Rural Institute

MAHARASHTRA

Amravati	Rural Institute
Gargoti	Shri Mouni Vidyapeeth Rural Institute
Wardha	Rural Institute

MYSORE

Hanumanamatti	Rural Institute

RAJASTHAN

Udaipur	Vidya Bhawan Rural Institute

UTTAR PRADESH

Bichpuri	Balwant Vidyapeeth Rural Institute

APPENDIX H

Indian University Examination Results

The information and data in this appendix are based on Part III: "University Examination Results 1964-65." **University Development in India: Basic Facts and Figures 1966-67.** New Delhi: University Grants Commission, 1967. This appendix has been designed especially for use with the Admission and Placement Recommendations in Chapter IX.

The 1965 Annual and the 1964 Supplementary Examinations conducted by the Indian universities are the ones for which statistics have been presented. In addition to examination results for degree programs, intermediate, pre-university and pre-professional examinations conducted by Indian universities are covered in these results.

1. OVERALL EXAMINATION APPEARANCES AND PASSES ALL INDIA 1964 AND 1965

Examination	No. Appeared	No. Passed	Pass % 1965	Pass % 1964
ARTS				
B.A.	171,314	86,509	50.5	50.4
B.A. (Hons)	11,784	7,748	65.8	60.5
M.A.	32,449	26,180	80.7	82.2
B.Lib.	228	187	82.0	91.4
M.Lib.	24	24	100.0	92.3
B.Theology	4	3	75.0	100.0
M.S.W.	127	110	86.6	75.2
M.L.W.	28	24	85.7	92.0
M.Litt	10	10	100.0	76.5
B.O.L.	245	175	71.4	60.1
M.O.L.	1	1	100.0	100.0
SCIENCE				
B.Sc.	69,716	35,698	51.2	46.7
B.Sc. (Mons)	3,701	2,532	68.4	57.8
M.Sc.	9,328	7,290	78.2	78.0
B.S.Sc.	8	6	75.0	..
COMMERCE				
B.Com.	35,533	18,170	51.1	51.1
B.Com. (Hons)	777	503	64.7	71.1
M.Com.	4,195	2,864	68.3	73.9
M.B.A.	35	30	85.7	90.5
EDUCATION				
B.Ed.	27,390	23,346	85.2	83.3
M.Ed.	993	803	80.9	82.7
LAW				
LL.B./B.L.	13,505	8,691	64.4	59.2
LL.M./M.L.	411	100	24.3	29.9

Examination	No. Appeared	No. Passed	Pass % 1965	Pass % 1964
ENGINEERING				
B.E./B.Sc.	11,773	8,876	75.4	73.9
M.Sc. (Engg) /M.E.	444	372	83.8	84.3
B.Arch.	333	166	49.8	55.9
B.Sc. (Min. & Met.)	359	321	89.4	97.0
M.Sc. (Min. & Met.)	68	65	95.6	94.7
B.Sc. (Ag.Engg.)	35	28	80.0	64.7
TECHNOLOGY				
B.Sc. (Tech.)	407	346	85.0	92.3
B.Sc. (Text.)	112	108	96.4	85.7
B.Sc. (Text. Tech.)	39	38	97.4	92.9
B.Sc. (Text. Engg.)	21	18	85.7	81.8
M.Sc. (Tech.)	143	140	97.9	83.6
B.Ch.E.	4	4	100.0	..
MEDICINE				
M.B.B.S.	8,544	4,635	54.2	51.0
A.B.M.S./B.A.M.S.	407	203	49.9	55.4
B.U.M.S.	39	32	82.1	84.6
B.M.B.S.	1	1	100.0	100.0
M.D.	1,339	464	34.7	33.7
M.S.	1,207	466	38.6	35.2
B.Sc. (Med.)	8	6	75.0	58.3
M.Sc. (Med.)	59	38	64.4	61.9
M.O.	14	11	78.6	41.7
G.H.M.S.	5	2	40.0	..
M.Ch.	3	2	66.7	50.0
B.Pharm.	279	176	63.1	70.7
M.Pharm.	52	44	84.6	64.7
B.Sc. (Nursing)	71	64	90.1	88.9
M.Sc. (Nursing)	2	2	100.0	100.0
B.D.S.	368	240	65.2	71.7
M.D.S.	40	26	65.0	63.6
AGRICULTURE				
B.Sc. (Ag.)	7,272	5,569	76.6	74.7
M.Sc. (Ag.)	1,171	1,140	97.4	97.8
B.Sc.Dairy	33	30	90.9	100.0
M.Sc.Dairy	21	18	85.7	96.0
VET. SCIENCE				
B.V.Sc.	1,403	1,030	73.4	69.7
M.V.Sc.	164	151	92.1	91.6

Examination	No. Appeared	No. Passed	Pass % 1965	Pass % 1964
MUSIC & FINE ARTS				
B.Mus.	179	156	87.2	88.9
B.Mus. (Hons)	19	16	84.2	95.2
M.Music	51	33	64.7	70.5
B.A. (Fine)	15	14	93.3	100.0
M.A. (Fine)	2	2	100.0	100.0
PHYSICAL EDUCATION & JOURNALISM				
M.P.E.	14	12	85.7	..
B.Phy.Education	111	94	84.7	91.2
B.Journalism	34	23	67.6	..
INTERMEDIATE, PRE-UNIVERSITY, AND PRE-PROFESSIONAL				
PUC Arts	150,292	76,671	51.0	48.6
PUC Science	96,715	48,078	49.7	49.9
PUC Commerce	25,252	14,410	57.1	46.7
PUC Whole	155,057	62,667	40.4	44.6
PUC Music	8	7	87.5	80.0
I. Arts	8,751	4,256	48.6	42.4
I. Science	7,231	5,124	70.9	61.0
I. Commerce	2,403	758	31.5	43.0
I. Whole	239	96	40.2	30.6
I. Music	340	266	78.2	79.0
PUC Agri.	1,782	1,007	56.5	58.2
I. Sc. Agri.	358	210	58.7	68.3
P.P. Agri.	106	61	57.5	42.7
P.P. Engg.	6,381	3,472	54.4	55.5
P.P. Med.	5,235	3,482	66.5	62.5
I. Pharm	241	132	54.8	..
P.P. (B.D.S.)	29	22	75.9	50.0
P.P. Whole	8,462	4,393	51.9	51.7
P.P. (Vet. Science)	55	39	70.9	32.6
I.Sc. (Med.)	58	11	19.0	30.4
I.Sc. (Non.Med.)	372	103	27.7	28.0
I. Arch.	166	87	52.4	57.4
I. Nursing	24	17	70.8	52.2
P.P. Nursing	11	10	90.9	..
P.P. Agriculture	18	1	5.6	..

2. DISTRIBUTION OF EXAMINATION CANDIDATES BY DIVISION AND FAILURES ALL INDIA 1965: B.A., B.Sc., B.Com., M.A., M.Sc., AND M.Com.

Examination	Number Appeared	Number Passed	I Division	II Division	III Division
1. B.A.	97,061	51,713	531	12,253	38,929
%		100.0	1.0	23.7	75.3

Examination		Number Appeared	Number Passed	I Division	II Division	III Division
2. B.Sc.		50,105	26,157	3,456	10,788	11,913
	%		100.0	13.2	41.2	45.6
3. B.Com		17,402	9,095	119	2,211	6,765
	%		100.0	1.3	24.3	74.4
4. M.A.		32,409	26,144	5,402	13,812	10,930
	%		100.0	5.4	52.8	41.8
5. M.Sc.		9,222	7,196	2,146	4,289	761
	%		100.0	29.8	59.6	10.6
6. M.Com.		4,122	2,624	141	1,546	937
	%		100.0	5.4	58.9	35.7

3. DISTRIBUTION OF EXAMINATION CANDIDATES BY DIVISIONS/ FAILURES WITHIN EACH UNIVERSITY 1965: B.A., B.Sc., B.Com., M.A., C.Sc., AND M.Com.

B.A.

University	No. Appeared	No. Passed	I	II	III
1. Agra	12,341	6,048	22	1,650	4,376
2. Aligarh	180	134	14	89	31
3. Allahabad	1,621	1,124	20	518	586
4. Andhra	2,778	968	13	77	878
5. Annamalai	74	45	..	12	33
6. Banaras	840	735	24	241	470
7. Bangalore	586	249	9	51	189
8. Baroda (Incl.H.Sc.)	337	242	10	76	156
9. Bhagalpur	3,110	1,352	..	67	1,285
10. Bihar	3,304	2,015	..	249	1,763
11. Bombay	3,418	2,312	36	669	1,607
12. Delhi	4,636	2,661	9	238	2,414
13. Gorakhpur	3,777	2,206	5	228	1,973
14. Gujarat	6,082	4,778	44	1,590	3,144
15. Indore	1,049	524	1	246	277
16. Jabalpur	1,175	788	7	334	447
17. Jadavpur	94	81	10	64	7
18. Jammu & Kashmir	983	577	16	217	344
19. Jodhpur	631	337	2	87	248
20. Karnatak	1,540	935	3	85	847
21. Kerala	2,216	1,695	46	307	1,342
22. Lucknow	2,771	1,564	29	490	1,045
23. Madras	4,121	2,025	37	262	1,726
24. Marathwada	689	326	2	76	248
25. Mysore	1,276	473	4	67	402
26. Nagpur	1,500	952	8	480	464
27. North Bengal	2,217	1,441	18	..	1,423
28. Osmania	2,130	940	18	218	704
29. Panjab	4,306	2,881	24	481	2,376

B.A.

University	No. Appeared	No. Passed	I	II	III
30. Patna	358	132	..	25	107
31. Poona	2,627	1,432	11	499	922
32. Punjabi	303	194	3	37	154
33. Rajasthan	8,125	1,836	2	397	1,437
34. Ranchi	2,539	1,038	1	97	940
35. Ravi Shanker	2,441	900	8	149	743
36. Sardar Patel	328	324	25	254	45
37. Saugar	4,640	1,955	15	337	1,603
38. Shivaji	1,162	860	6	354	500
39. S.N.D.T. Women's	1,297	737	9	274	454
40. Srivenkateswara	453	188	10	38	140
41. Udaipur	405	253	1	49	203
42. Vikram	2,601	1,459	9	574	876
Total	97,061	51,713	531	12,253	38,929

B. Sc.

University	No. Appeared	No. Passed	I	II	III
1. Agra	4,609	2,605	299	1,517	789
2. Aligarh	189	107	7	73	27
3. Allahabad	730	516	51	221	244
4. Andhra	5,561	1,587	195	405	987
5. Andhra Pradesh Agricultural	34	29	..	8	21
6. Annamalai	178	90	18	31	41
7. Banaras	234	194	22	108	64
8. Bangalore	1,978	585	87	157	341
9. Baroda (incl. H.Sc.)	185	125	29	58	38
10. Bhagalpur	796	352	2	99	251
11. Bihar	1,155	561	..	134	427
12. Bombay	1,953	1,359	103	810	446
13. Delhi	341	239	23	95	141
14. Gorakhpur	1,084	620	29	226	365
15. Gujarat	2,420	1,832	110	764	958
16. Indore	255	191	12	141	38
17. Jabalpur	542	238	20	132	86
18. Jadavpur	62	57	8	46	3
19. Jammu & Kashmir	512	228	8	119	101
20. Jodhpur	117	63	4	34	25
21. Karnatak	438	329	24	142	163
22. Kerala	6,127	3,990	771	1,336	1,883
23. Lucknow	1,201	650	47	267	336
24. Madras	6,342	3,385	936	1,220	1,229
25. Marathwada	532	209	6	73	130
26. Mysore	2,468	643	70	195	378
27. Nagpur	497	355	24	285	46
28. North Bengal	231	208	43	..	165
29. Osmania	2,077	783	74	287	422

B. Sc.

University	No. Appeared	No. Passed	I	II	III
30. Panjab	1,788	1,542	172	616	754
31. Patna	137	65	1	22	42
32. Poona	843	469	85	251	133
33. Punjabi	64	49	2	24	23
34. Rajasthan	529	194	21	123	50
35. Ranchi	779	198	4	45	149
36. Ravi Shanker	858	305	12	103	190
37. Sardar Patel	199	119	18	61	40
38. Saugar	969	317	15	151	151
39. Shivaji	356	202	40	105	57
40. S.N.D.T.Women's	55	48	..	33	15
41. Srivenkateswara	303	262	48	104	110
42. Udaipur	65	56	7	22	27
43. Vikram	292	181	9	145	27
Total	50,105	26,157	3,456	10,788	11,913

B. Com.

University	No. Appeared	No. Passed	I	II	III
1. Agra	1,776	985	9	163	813
2. Aligarh	42	37	6	18	13
3. Allahabad	223	108	1	19	88
4. Andhra	7	6	..	1	5
5. Annamalai	79	41	3	9	29
6. Banaras	175	165	14	62	89
7. Bangalore	578	161	1	31	129
8. Baroda (incl.H.Sc.)	439	284	7	81	196
9. Bhagalpur	292	109	..	26	83
10. Bihar	276	99	..	9	90
11. Bombay	829	379	1	66	312
12. Delhi	364	253	12	94	147
13. Gorakhpur	340	226	1	35	190
14. Gujarat	1,596	865	1	95	769
15. Indore	309	189	..	72	117
16. Jabalpur	366	223	2	63	158
17. Jammu & Kashmir	26	18	..	14	4
18. Jodhpur	131	91	1	41	49
19. Karnatak	268	98	..	25	73
20. Lucknow	321	169	3	43	123
21. Madras	1,042	553	8	129	416
22. Marathwada	321	149	4	42	103
23. Mysore	589	194	1	41	152
24. Nagpur	1,497	823	4	258	561
25. Osmania	954	467	13	137	317
26. Panjab	138	104	..	15	89
27. Patna	77	64	..	20	44
28. Poona	968	437	5	61	371
29. Punjabi	70	47	..	13	34

B. Com.

University	No. Appeared	No. Passed	I	II	III
30. Rajasthan	987	343	7	172	164
31. Ranchi	451	191	6	53	132
32. Ravi Shanker	373	310	..	62	248
33. Sardar Patel	106	102	3	36	63
34. Saugar	360	264	2	47	215
35. Shivaji	424	139	1	29	109
36. Srivenkateswara	99	46	..	12	34
37. Udaipur	45	42	2	14	26
38. Vikram	464	314	1	103	210
Total	17,402	9,095	119	2,211	6,765

M.A.

University	No. Appeared	No. Passed	I	II	III
1. Agra	5,703	5,008	255	1,583	3,170
4. Andhra	176	149	19	130	..
3. Allahabad	682	661	40	296	325
4. Andhra	176	149	19	130	..
5. Annamalai	71	62	15	47	..
6. Banaras	793	688	21	407	260
7. Bangalore	87	73	2	34	37
8. Baroda	99	84	6	40	38
9. Bhagalpur	729	588	9	353	226
10. Bihar	1,024	904	38	606	260
11. Bombay	597	442	17	211	214
12. Burdwan	315	212	5	207	..
13. Calcutta	3,721	2,502	50	2,452	..
14. Delhi	1,304	1,053	114	515	424
15. Gauhati	732	432	12	420	..
16. Gorakhpur	714	648	10	227	411
17. Gujarat	905	396	9	387	..
18. Indore	447	425	25	217	183
19. Jabalpur	464	419	26	161	232
20. Jadavpur	271	229	14	215	..
21. Jammu & Kashmir	337	254	41	119	94
22. Jiwaji	517	479	18	190	271
23. Jodhpur	148	131	13	66	52
24. Kalyani	19	19	..	19	..
25. Karnatak	380	210	20	87	103
26. Kerala	451	407	45	212	150
27. Kurushetra	104	100	12	47	41
28. Lucknow	582	559	38	283	238
29. Madras	534	441	49	392	..
30. Magadh	399	212	16	196	..
31. Marathwada	139	75	19	56	..
32. Mysore	177	149	17	74	58
33. Nagpur	778	629	26	296	307
34. Osmania	294	217	39	157	21

M.A.

University	No. Appeared	No. Passed	I	II	III
35. Panjab	1,817	1,557	108	504	945
36. Patna	670	572	52	442	78
37. Poona	511	377	7	139	231
38. Punjabi	124	108	18	60	30
39. Rajasthan	1,479	1,155	25	365	765
40. Ranchi	337	324	15	238	71
41. Ravi Shanker	383	298	3	88	207
42. Sardar Patel	112	86	9	38	39
43. Saugar	845	742	30	282	430
44. Shivaji	131	96	1	50	45
45. S.N.D.T. Women's	228	134	3	33	98
46. Srivenkateswara	81	75	6	69	..
47. Udaipur	120	102	7	30	65
48. Utkal	379	314	22	217	75
49. Vikram	927	837	23	316	498
50. Visva Bharati	74	51	5	46	..
Total	32,409	26,144	1,402	13,812	10,930

M. Sc.

University	No. Appeared	No. Passed	I	II	III
1. Agra	1,306	1,063	245	623	195
2. Aligarh	140	133	31	77	15
3. Allahabad	190	152	39	79	34
4. Andhra	252	222	124	98	..
5. Annamalai	159	127	49	78	..
6. Banaras	150	145	61	65	19
7. Bangalore	216	165	35	78	40
8. Baroda	145	120	31	70	19
9. Bhagalpur	48	24	4	9	10
10. Bihar	192	145	13	111	21
11. Bombay	396	245	51	121	73
12. Burdwan	1[illegible]	63	18	45	..
13. Calcutta	682	445	112	333	..
14. Delhi	142	131	74	52	5
15. Gauhati	185	157	42	115	..
16. Gorakhpur	127	107	16	73	18
17. Gujarat	329	166	48	118	..
18. Indore	104	80	25	41	14
19. Jabalpur	119	105	32	59	14
20. Jadavpur	109	87	41	46	..
21. Jammu & Kashmir	88	79	15	57	7
22. Jiwaji	119	110	34	70	6
23. Jodhpur	84	64	22	33	9
24. Kalyani	37	37	12	25	..
25. Karnatak	183	165	36	117	12
26. Kerala	411	351	116	174	61
27. Kurushetra	53	49	20	25	4

M. Sc.

University	No. Appeared	No. Passed	I	II	III
28. Lucknow	188	170	37	105	28
29. Madras	649	446	103	343	..
30. Magadh	44	18	5	13	..
31. Marathwada	71	37	12	25	..
32. Mysore	154	81	16	44	21
33. Nagpur	177	146	51	86	9
34. Osmania	117	108	59	48	1
35. Panjab	171	171	97	70	4
36. Patna	242	189	55	120	14
37. Poona	286	167	37	103	27
38. Punjabi	28	28	23	$	..
39. Rajasthan	173	147	42	87	18
40. Ranchi	74	74	11	62	1
41. Ravi Shanker	47	44	14	27	3
42. Roorkee	25	25	13	12	..
43. Sardar Patel	61	54	18	26	10
44. Saugar	182	178	48	102	23
45. Shivaji	4	1	..	..	1
46. Srivenkateswara	100	94	3	56	..
47. Udaipur	8	6	1	4	1
48. Utkal	162	120	48	64	8
49. Vikram	170	154	46	92	16
50. Visva Bharati	22	19	16	3	..
Total	9,222	7,196	2,146	4,289	761

M. Com.

University	No. Appeared	No. Passed	I	II	III
1. Agra	572	528	57	222	249
2. Aligarh	12	12	2	8	2
3. Allahabad	99	94	2	43	49
4. Andhra	54	43	..	43	..
5. Annamalai	14	14	2	12	..
6. Banaras	31	29	7	22	..
7. Baroda	25	22	..	9	13
8. Bhagalpur	34	29	1	22	6
9. Bihar	22	18	3	14	1
10. Bombay	146	77	1	10	66
11. Calcutta	1,200	514	..	514	..
12. Delhi	34	27	1	11	15
13. Gauhati	99	69	3	66	..
14. Gorakhpur	37	32	..	9	23
15. Gujarat	180	71	..	71	..
16. Indore	97	85	2	23	60
17. Jabalpur	213	204	..	..	..
18. Jiwaji	51	48	4	15	29
19. Jodhpur	31	28	3	14	11
20. Karnatak	66	48	..	12	36

University	M. Com. No. Appeared	No. Passed	I	II	III
21. Kerala	55	53	3	25	25
22. Lucknow	90	85	5	38	42
23. Madras	45	36	4	32	..
24. Magadh	6	4	..	4	..
25. Marathwada	31	17	1	16	..
26. Mysore	21	18	..	8	10
27. Nagpur	222	117	4	57	56
28. Osmania	20	19	1	9	9
29. Panjab	6	6	2	4	..
30. Patna	55	47	3	40	4
31. Poona	103	42	..	4	38
32. Rajasthan	104	86	5	39	42
33. Ravi Shanker	104	92	7	39	46
34. Sardar Patel	39	25	..	4	21
35. Saugar	79	79	14	54	11
36. Shivaji	11	8	..	3	5
37. Udaipur	8	8	..	4	4
38. Utkal	16	11	..	8	3
39. Vikram	90	83	4	18	61
Total	4,122	2,624	141	1,546	937

4. DISTRIBUTION OF EXAMINATION CANDIDATES BY DIVISIONS/ FAILURES WITHIN SUBJECT FIELD ALL INDIA 1965

Name of Subject	M.A. Number Appeared	Number Passed	I Division	II Division	III Division
1. Ancient History & Archaeology	61	56	9	40	7
2. Ancient Indian History	220	211	7	145	59
3. Ancient Indian Hist. & Culture	193	137	5	121	11
4. Arabic	23	23	11	8	4
5. Arabic Culture	4	4	..	4	..
6. Archaeology	6	5	..	5	..
7. Art & Architecture	5	4	1	3	..
8. Anthropology	55	51	4	37	10
9. Applied Economics	18	11	..	7	4
10. Assamese	163	86	1	85	..
11. Applied Maths.	1	..	..	..	..
12. Ardh Magadhi	1	1	..	1	..
13. Bengali	1,101	893	8	866	19
14. Botany	2	1	..	1	..
15. Criminology & For. Science	4	3	..	1	2
16. Comparative Litt.	19	15	..	15	..

Name of Subject	Number Appeared	Number Passed	I Division	II Division	III Division
17. Comparative Hist.	1	1	..	1	..
18. Classics	2	1	..	1	..
19. Comp. Philology	13	10	1	9	..
20. Drawing & Painting	77	68	13	38	17
21. Economics	5,635	4,337	100	1,884	2,353
22. English	4,251	3,090	26	1,230	1,834
23. Education	367	304	42	200	62
24. French	15	13	5	8	..
25. Geography	1,062	999	98	522	379
26. German	7	7	1	3	3
27. Gujarati	315	158	4	102	52
28. Hindi	3,575	3,203	170	1,841	1,192
29. History	3,668	2,825	64	1,581	1,180
30. Human Geography	5	4	1	3	..
31. Modern & Medieval History	128	123	2	48	73
32. Home Science	4	3	..	3	..
33. Indology	3	3	..	1	2
34. Indian Philosophy & Religion	4	4	1	3	..
35. Islamic Culture	332	248	..	247	1
36. Indian Humanities	7	7	1	5	1
37. International Relations	34	26	..	26	..
38. Kannada	54	29	3	19	7
39. Linguistics	18	17	8	9	..
40. Labour and Social Welfare	222	215	19	162	34
41. Mathematics	638	464	140	203	121
42. Malayalam	64	56	8	32	16
43. Military Science	7	7	3	4	..
44. Music	56	54	7	31	16
45. Marathi	329	250	5	103	142
46. Maithili	22	21	7	14	..
47. Modern Indian Language	32	31	5	23	3
48. Oriya	40	38	4	29	5
49. Operational Research	11	11	6	4	1
50. Philosophy	939	717	54	539	124
51. Political Science	4,266	3,453	99	1,658	1,696
52. Philosophy and Linguistics	2	2	1	1	..
53. Psychology	728	648	53	377	218
54. Punjabi	151	132	6	48	78
55. Public Administration	195	177	9	100	68
56. Persian	103	97	33	55	9
57. Pali	24	22	9	12	1
58. Prakrit & Jainology	8	8	1	7	..

Name of Subject	Number Appeared	Number Passed	I Division	II Division	III Division
59. Rural Economics and Co-operation	27	19	..	16	3
60. Religion & Culture	11	9	2	7	..
61. Sanskrit	1,199	1,035	255	586	194
62. Sanskrit Culture	1	1	..	1	..
63. Sociology	1,672	1,461	26	576	859
64. Statistics	83	52	9	29	14
65. Social Welfare/ Social Work	222	215	19	162	34
66. Social Anthropology	11	11	2	3	6
67. Tamil	68	65	17	48	..
68. Telugu	54	49	16	32	1
69. Urdu	262	248	60	152	36
70. Western History	6	6	1	5	..
Total	32,906	26,554	1,462	14,142	10,950

M. Sc.

Name of Subject	Number Appeared	Number Passed	I Division	II Division	III Division
1. Physics	1,538	1,304	458	771	75
2. Chemistry	2,075	1,723	528	1,096	99
3. Mathematics	2,480	1,436	361	713	362
4. Botany	780	719	152	503	64
5. Zoology	809	754	187	507	60
6. Geology	368	345	151	186	8
7. Statistics	470	295	74	165	56
8. Anthropology	64	60	9	48	3
9. Bio-Chemistry	116	100	41	45	14
10. Applied Physics	27	27	16	11	..
11. Applied Chemistry	10	10	8	2	..
12. Marine Biology	25	25	15	10	..
13. Analytical Chemistry	21	18	7	11	..
14. Micro Biology	13	11	6	5	..
15. Meteorology	29	16	3	13	..
16. Agri-Chemistry	4	4	1	2	1
17. Applied Geology	76	73	36	25	12
18. Geo-Physics	48	45	26	19	..
19. Home Science	103	91	22	69	..
20. Geography	79	70	9	59	2
21. Crim. & For. Science	5	4	2	2	..
22. Agr. Botany	21	21	6	15	..
23. Applied Mathematics	52	34	14	20	..
24. Spectroscopy	11	11	1	8	2
25. Physiology	26	25	3	22	..
26. Mathematical Physics	6	4	2	2	..
27. Nuclear Physics	28	25	14	11	..
28. Ag. Zoology	6	6	2	2	2

Name of Subject	Number Appeared	Number Passed	I Division	II Division	III Division
29. Bio-Physics	4	4	1	3	..
30. Psychology	28	23	3	20	..
31. Astronomy	7	5	4	1	..
32. Food & Nutrition	23	22	13	9	..
33. Ore Dressing	2	2	..	2	..
34. Home Management	15	14	4	10	..
35. Institute Management	4	4	..	4	..
36. Textile Clothing	10	8	3	5	..
37. Military Science	10	10	3	7	..
Total	9,393	7,348	2,185	4,403	760

APPENDIX I

ABBREVIATIONS, INITIALS, AND TITLES

This list is based on the *Handbook of Universities in India: 1963,* University Grants Commission, New Delhi, India; the *Universities Handbook: India and Ceylon 1969,* Inter University Board of India and Ceylon, New Delhi, India; the *Directory of Institutions for Higher Education 1967* Ministry of Education, Government of India; *Post-Graduate Medical Education: Directory of Post-Graduate Medical Degrees and Diplomas in India 1966,* Ministry of Health and Family Planning, Government of India; and various university and college prospectuses, syllabi, and other bulletins.

A.B.M.S.	Bachelor of Ayurvedic Medicine and Surgery
Adm.	Admitted or Admission
Aggr., Aggreg.	Aggregate
A.M.I.E.	Associate Member, Institution of Engineers (India)
Ay., Ayur.	Ayurveda, Ayurvedic
B.A.	Bachelor of Arts
B.A.M.S.	Bachelor of Ayurvedic Medicine and Surgery
B.Arch.	Bachelor of Architecture
B.Ch.Engg.	Bachelor of Chemical Engineering
B.Com.	Bachelor of Commerce
B.D.S.	Bachelor of Dental Surgery
B.Educ., B.Ed.	Bachelor of Education
B.E., B.Engg.	Bachelor of Engineering
B.I.M.	Bachelor of Indian Medicine
B.L.	Bachelor of Laws
B.Lib.Sc.	Bachelor in Library Science
B.M., B.Mus.	Bachelor of Music
B.O.L.	Bachelor of Oriental Learning
B.Sc.	Bachelor of Science
B.Sc.-Ag., Agr.	Bachelor of Science in Agriculture
B.Sc.-Engg.	Bachelor of Science in Engineering
B.T.	Bachelor of Teaching
B.Tech.	Bachelor of Technology
B.Text.	Bachelor of Textiles
B.Theol.	Bachelor of Theology
B.U.M.S.	Bachelor of Unani Medicine and Surgery
B.V.Sc. and A.H.	Bachelor of Veterinary Science and Animal Husbandry
Certif., Cert.	Certificate
Clin.	Clinical
Coll.	College
Comm., Com.	Commerce
D.A.M.	Doctor of Ayurvedic Medicine
D.Lit., D.Litt.	Doctor of Letters
D.M.	Doctor of Medicine
D.M.A.	Doctor of Ayurvedic Medicine
D.O.L.	Doctor of Oriental Learning
D.Sc.	Doctor of Science
D.Theol.	Doctor of Theology

D.A.	Diploma in Anesthesiology
D.A.M.	Diploma in Ayurvedic Medicine
D.B.A.	Diploma in Business Administration
D.C.H.	Diploma in Child Health
D.C.P.	Diploma in Clinical Pathology
D.C.W.	Diploma in Child Welfare
D.G.O.	Diploma in Gynecology and Obstetrics
D.G.S.	Diploma in General Surgery
D.I.H.	Diploma in Industrial Health
D.I.I.Sc.	Diploma, Indian Institute of Science
D.I.M.	Diploma in Industrial management
Dipl., Dip., D.	Diploma
Dist.	District
D.L.O.	Diploma in Laryngology and Otology
D.O.	Diploma in Ophthalomology
D.O.G.	Diploma in Obstetrics and Gynecology
D.O.M.S.	Diploma in Ophthalmic Medicine and Surgery
D.P.A.	Diploma in Public Administration
D.P.E., D.P.Ed.	Diploma in Physical Education
D.P.H.	Diploma in Public Health
D.P.M.	Diploma in Psychological Medicine
D.T.	Diploma in Teaching
D.T.D.	Diploma in Tubercular Diseases
D.Theol.	Diploma in Theology
D.T.M.H.	Diploma in Tropical Medicine and Hygiene
D.V.D.	Diploma in Veneral Diseases and Dermatology
Engg.	Engineering
Exp.	Experience
F.A.	Fine Arts
F.Sc.	First Science
F.T.	Full-Time
Govt.	Government
Hons.	Honours
Hr.Sec.	Higher Secondary School Certificate
H.S.C.	High School Certificate
H.S.S.C.	Higher Secondary School Certificate
I.I.T.	Indian Institute of Technology
Ind.	Indian
Indus.	Industrial
Int., Inter., I.	Intermediate
I.T.I.	Industrial Training Institute
L.	Licentiate, Licenciate
LL.B.	Bachelor of Laws
L.L.M.	Master of Laws
L.T.	Licentiate in Teaching

M.A.	Master of Arts
Matric.	Matriculate, Matriculation
M.B.A.	Master of Business Administration
M.B.B.S.	Bachelor of Medicine, Bachelor of Surgery
M.Com.	Master of Commerce
M.D.M.S.	Doctor of Medicine, Master of Surgery
Med.	Medicine, Medical
Metall., Met.	Metallurgy
Mfg.	Manufacture, Manufacturing
Mgt.	Management
Min.	Mining, Minimum
M.L.	Master of Laws
M.M.	Master of Music
M.N.	Master of Nursing
M.O.	Master of Obstetrics
M.O.L.	Master of Oriental Learning
M.S.	Master of Surgery
M.Sc.	Master of Sciences
M.Sc.-Ag., Agr.	Master of Science in Agriculture
Mss.	Manuscript or Manuscripts
M.Theol.	Master of Theology
N.D.A.I.C.T.E.	National Diploma of All India Council for Technical Education
P.G.	Postgraduate
Pharm.	Pharmacy
Ph.D.	Doctor of Philosophy
Pr., Pract., P.	Practice, Practical, Practicum
Pre-Prof., P.P.	Pre-Professional Examinations, Certificate, or Course of Study
Pre-Univ., P.U.C.	Pre-University Examinations, Certificate, or Course of Study
Prof.	Professor, Professional, Proficiency
Prov.	Provisional
P.T.	Part-Time
P.U.E.	Pre-University Examinations
Sec.	Secretarial, Secondary
Sci., Sc.	Science
S.Sc.	Second Year Science
S.S.C.	Secondary School Certificate
S.S.L.C.	Secondary School Leaving Certificate
Subj.	Subject
T.	Theory
T.D.	Diploma in Teaching
Tech.	Technical, Technology
Tele.	Telecommunication
T.Sc.	Third Year Science
T.T.C.	Teachers Training Certificate
U.P.E.	University-Previous Examinations

APPENDIX J

Syllabi, Examination Schemes and Teaching Schedules

This appendix has been designed to present samples of syllabi, examination schemes and teaching schedules used in the Indian educational system: (1) to familiarize the admission officer with such references in a general way; (2) to support the proposition advanced in Chapter IX—Admission and Placement Recommendations that such material should be sought from Indian applicants; and (3) to serve as a reference for use in specific admission and placement decisions based on Chapter IX.

For additional discussion of syllabi, examination schemes and teaching schedules, the reader is referred to Chapter VI—Higher Education.

1. Bachelor of Arts Examination Scheme

The B.A. Examination Scheme that follows has been extracted from the **Handbook 1967-68: St. Xavier's College,** Bombay University.

EMAMINATION FOR THE DEGREE OF B.A.

The Schemes for the B.A. General and Special Courses are as follows:

B.A. GENERAL

I. English Compulsory: Two papers of three hours and one hundred marks each, of which one shall include composition.

II. Four other voluntary subjects (with two papers in each of three hours and of one hundred marks each save as hereinafter otherwise provided) to be selected from the following Groups (A) to (J), provided that the candidate chooses his subjects from at least three Groups and provided further that the candidate who takes F (iv) shall take F (i) and that the candidate who takes J (v) shall take J (i) but not F (iv).

N.B.—Identical subjects occurring under two separate Groups shall not be offered by candidates as two separate subjects.

(A) Languages

(a) Modern European: English, French, German, Portuguese, Italian, Spanish. Two Papers based on texts of Modern Literature, Prose, Poetry and Drama in each Language.

(b) Modern Indian: Marathi, Gujarati, Kannada, Sindhi, Urdu, Hindi. Two Papers: Paper I: Poetry. Paper II: Drama and Prose: Modern Texts.

(c) Classical, Oriental and European: Sanskrit, Pali, Ardha-Magadhi, Arabic, Persian, Avesta-Pahlavi, Latin, Greek, Hebrew. Two Papers: Texts.

(B) Philosophy

(i) History of Philosophy; (ii) Psychology; (iii) Ethics and (iv) Education.

(C) Psychology

(i) Basic Psychology; (ii) Biopsychology; (iii) Abnormal and Child Psychology.

N.B.—Those who take (ii) or (iii) shall also take (i).

(D) History

(i) Ancient Europe; (ii) Modern Europe; (iii) Ancient and Mediæval Indian; (iv) Modern India; (v) Persian History; (vi) Constitutional History; (vii) Political Science; (viii) Cultural History of India; (ix) Islamic Culture; (x) English History.

(E) Ancient Indian Culture

(i) Cultural History of India; (ii) Literature and Philosophy of Ancient India; (iii) Art and Religion of Ancient India.

(F) Economics

(i) Principles of Economics; (ii) Economic History; and (iii) Statistical Methods.

(G) Sociology

Society and Social Evolution.

(H) Anthropology

(i) Physical Anthropology; (ii) Cultural Anthropology.

(I) Politics

(i) Political Science, (ii) Public Administration and Local Government and (iii) Constitutional History.

(J) Mathematics

(i) Pure Mathematics; (ii) Applied Mathematics; (iii) Algebra and Geometry; (iv) Calculus and Differential Equations and (v) Statistics.

N.B.—Subjects (iii) and (iv) must be taken together.

Alternative Scheme

(i) Algebra and Geometry; (ii) Analysis; (iii) Analysis, and Analysis and Differential Equations.

(Note: Candidates offering two subjects in Mathematics must select the combinations as under:—

I. (i) Algebra and Geometry and (ii) Analysis; Or

II. (i) Algebra and Geometry and (iii) Analysis, and Analysis and Differential Equations).

(K) Science

(1) Physics; (ii) Chemistry; (iii) Botany; (iv) Zoology; (v) Geology; (vi) General Science.

B.A. SPECIAL

I. English Compulsory: Two Papers of three hours and one hundred marks each, of which one shall include composition.

II. Four other voluntary subjects (with two papers in each of three hours' duration and one hundred marks each save as hereinafter otherwise provided), so that at least three subjects listed in Roman numerals under any one Group from among the Groups (B) to (K), or three heads listed in Roman numerals under any one Language from among the Languages under Group (A)—Sub-groups (a) to (d), are selected.

The Groups and sub-groups and subjects are as under:—

N.B.—Identical subjects occurring under two separate Groups shall not be offered by candidates as two separate subjects.

(A) Languages

(a) English: (i) Papers I and II: The same as for the B.A. (General). (ii) Two literary forms: Chaucer (Prologue and a Canterbury Tale), and History of the English Language. (iii) Criticism and Prosody; History of English Literature.

(aa) Old English:—(i) Anglo-Saxon (ii) Middle English (iii) Social History.

(b) Modern European: French, or German, or Portuguese, or Italian, or Spanish. (i) Papers I and II. The same as for the B.A. (General). (ii) Translation, Essay, Grammar and Oral, Two Papers. (iii) History of Literature from 1500 to 1800 A.D. with a few outstanding illustrative works. Two Papers.

(c) Modern Indian: Marathi, or Gujarati, or Kannada, or Sindhi, or Urdu, or Hindi. (i) Papers I and II. The same as for B.A. (General). (ii) Translation, Essay, Grammar, History of the Language and Poetics and Literary Criticism. Two Papers. (iii) History of Literature up to 1950 A.D. with a few outstanding illustrative works of authors evenly distributed to cover the period—Two Papers.

(d) Classical: Sanskrit, or Pali, or Ardha-Magadhi, or Avesta-Pahlavi, or Persian, or Arabic, or Greek, or Latin, or Hebrew. (i) Papers I and II. The same as for the B.A. (General). (ii) Translation, Grammar and History of Literature. Two papers. (iii) Old Literature according to the basic requirements of each language. Two Papers.

(e) Ancient Indian culture, or Islamic Culture. Two Papers each.

(B) Philosophy

(i) History of Philosophy; (ii) Psychology; (iii) Ethics; (iv) Logic and Metaphysics; (v) Psychology & Philosophy of Religion.

N.B.—(a) Such of the candidates as take the six-paper course in Philosophy for the B.A. Special (Honours) examination may select any three of the subjects specified above, provided that the three subjects include (i) History of Philosophy and either (iv) Logic and Metaphysics or (v) Psychology and Philosophy of Religion.

(b) Such of the candidates as take the eight-paper course in Philosophy for the B.A. Special examination may select any four of the subjects specified above, provided that the four subjects include (i) History of Philosophy and (iv) Logic and Metaphysics.

(C) Psychology

(i) Basic Psychology; (ii) Biopsychology; (iii) Abnormal and Child Psychology; (iv) Applied Psychology and (v) Experimental Psychology.

N.B.—(I) Students must take (i) and (ii) and one out of the subjects (iii) or (iv).

(2) Students taking all the four subjects in Psychology must take (i), (ii), (v) and (iii) or (iv).

(D) History

(i) Ancient Europe; (ii) Modern Europe; (iii) Ancient and Mediæval India; (iv) Modern India; (v) Persian History; (vi) Constitutional History; (vii) Political Science; (viii) Cultural History of India; (ix) Islamic Culture; (x) English History.

N.B.—Every candidate must offer (ii) 'Modern Europe' and (iv) 'Modern India'.

(E) Ancient Indian Culture

(i) Cultural History of India; (ii) Literature and Philosophy of Ancient India; (iii) Art and Religion of Ancient India.

(F) Economics

(i) Principles of Economics; (ii) Economic History; (iii) Statistical Methods; and (iv) Problems of Indian Economic Development.

N.B.—Every Economics Special Candidate must offer (i) and (iv).

(G) Sociology

(i) Society and Social Evolution; (ii) Cultural Anthropology; (iii) Applied Sociology.

(H) Anthropology

(i) Physical Anthropology; (ii) Cultural Anthropology; (iii) Advanced Anthropology.

(I) Politics

(i) Political Science, (ii) History of Political Thought and Political Development in South-East Asia, China and Japan, (iii) Public Administration and Local Government, (iv) Constitutional History.

N.B.—Every candidate for the B.A. (Special) in Politics must offer (i) and (ii).

(J) Mathematics

(i) Algebra and Geometry; (ii) Analysis; (iii) Differential Equations, Vectors and Mechanics; (iv) Any two of the following papers: (1) Projective Geometry, (2) Mathematical Statistics, (3) Electricity and Magnetism, (4) Spherical Astromy, and (5) Selected **Topics.**

(K) Statistics

(i) Mathematical Analysis; (ii) Statistical Mathematics and Calculus of Probabilities; (iii) Elements of Statisical Inference and Pracical Statistics; and (iv) Applied Statistics and Econometrics.

N.B.—Subjects (i), (ii) and (iii) are compulsory. Candidates offering Statistics Group cannot take 'Statistical Methods' in the Group "Economics" and 'Statistics' in the Group "Mathematics" in lieu of '(iv) Applied Statistics and Econometrics' at the B.A. (Special) Examination.

Note:—The second paper in group 3 shall be a practical paper and 20 marks shall be reserved for (i) the laboratory note-book and (ii) a viva voce test at the time of the practical examinations.

(L) Science

(i) Physics; (ii) Chemistry; (iii) Botany; (iv) Zoology; (v) Geology; (vi) General Science.

2. Bachelor of Science Examination Scheme and Syllabus

The B.Sc. Examination Scheme and partial syllabus have been taken from the **Handbook 1967-68: St. Xavier's College,** Bombay University.

EXAMINATION FOR THE DEGREE OF B.SC.

Candidates must select any two of the following subjects, one of them being the Principal subject and the other Subsidiary. A sudent who takes the group of Physics and Chemistry for the B.Sc. examination and who had not offered Mathematics as one of his subjects at the Intermediate Science Examination shall take a course in Calculus irrespective of whether Physics is his Principal or his Susidiary subject.

1. Mathematics. 2. Statistics. 3. Physics. 4. Chemistry. 5. Botany. 6. Zoology. 7. Geology. 8. Animal Physiology. 9. Microbiology. 10. Comparative Anatomy and Embryology. 11. Experimental Psychology. 12. Geography. 13. Economics (as a Subsidiary subject only).

SYLLABUS

1. B.Sc. Mathematics

As a Subsidiary Subject
Four papers of three hours each and carrying 75 marks each.

Paper 1: Algebra and Geometry

(a) Algebra:

1. Complex Numbers: Equality, addition, subtraction, multiplication and division of the complex numbers. Modulus, amplitude. Representation in the Argand's diagram: geometrical addition, subtraction, multiplication and division of two complex numbers. Demoivre's theorem; roots of complex numbers, cube roots of unity.

2. *Matrices: Row-vectors, column-vectors, scalars; operations in matrix algebra*, matrix multiplication. Inversion and transposition matrices.

3. Determinants: Definition, properties and operations; product of two determinants of the third order; Determinant of an eliminant, applications to solutions of linear simultaneous equations. Laplace expansion of a determinant. Area, volume etc. in determinants. Evaluation of determinants.

2. B.Sc. Zoology

As a Subsidiary Subject

Two papers and two Practical Examinations each of 75 marks. The duration of each Practical shall not be less than 4 hours.

Cytology: Cell, protoplasm, nuclear divisions, cytoplasmic incursions, spermatogenesis, ogenesis and fertilisation. Histology (Vertebrates): Tissues: Epithelial, connective, muscular, nervous, blood and lymph. Organs: Stomach, intestine, liver, lung, pancreas, spleen, kidney and reproductive glands.

Embryology: Segmentation of the Zygote in Amphioxus and frog; Formation of three germinal layers and the origin of notochord, nerve-cord and enteric canal in frog. External characters of the following larvae: Ephrula trochophore nauplius, megalopa zoaea, glochildium, ascidian tadpole; campodeiform, eruciform and apodus larvae of insects.

Organic Evolution. Theories of Darwin, Lamarck, de Vrie and modern views on these theories.

Genetics: Mendel's two laws of inheritance and an elementary knowledge of Morgan's theory of the Gene.

Systematic Zoology: A general study of the following phyla and the classes and a detailed study of the types mentioned below:

Protozoa: Mastigophora: Euglena; Pnizopoda; Amoebah Ciliophora; Paramoecium; Sporozoa; Plasmodium. Porifera: Leucosolenia. Coelenterata: Hydrozoa: Obelia, Hydra & Scyphozoa: Aurealia; Actinozoa: Tealia; Otenophora; Pleurobrachia Platyhelminthes; Turbellaria: a Planarian: Trematoda; Distomum: Cestoda: Taenia. Nematoda: Ascaris. Annelida: Chaetopoda: Neris, Pheretima; Hirudinea; Hirundinaria. Arthropoda: Onychophora: Crustacea: Panulirus. Myriapoda: Scolotendra, external morphology only). Insects (Aptera, Orthoptera. Neuroptera, Hymenoptera, Lepidoptera, Hemiptera, Diptera): Periplaneta. Mouth parts of Musca, Tabanus, Cimex, Apis, Butterfly, Anopheles and Culex. Archnida: External Morphology only of Scorpio and Epeira, Mollusca: Gastropoda: Pila. Lamellibranchiata: Unio:Cephalopoda: Sepia. Echinodermato: Asteroidea: Starfish: Ophiuroidea: Echinoidea. Holothuroidea; any Holothurian; Crinoidea.

Chordata: Hemichorda; Urochorda; Cephalochorda; Cyclostomata; Elasmobranchi: Scoliodon; Teleostei; Dipnoi, Amphibia: Rana, Reptilla; Calotes (but for the study of the skeleton-Varanus). Identification of the following poisonous snakes from their scale characters: Bungarus caeruleus, Naia tripudians, Maia bungarus, Lacheisis gramineus, Echis carinata, Vipera russelli, Enhydrina valakadien. Aves: Columba. Mammalia: Rabbit and skull of Homo.

Practical Work

Every candidate shall have a complete laboratory course in accordance with the regulations issued from time to time by the Academic Council, on the recommendation of the Board of Studies. Each candidate shall produce a certificate from the Principal of the college that he has completed in a satisfactory manner the prescribed course. Every candidate must record his observations directly in the laboratory journal. Every journal is to be signed periodically by a member of the laboratory staff and certified by him at the end of the year. Candidates are to produce their journals at the practical examination and such journals may be taken into account by the examiners in assigning marks.

10 marks will be allotted to the journals. These marks shall be out of the total marks assigned to practicals. These marks will be assigned by the examiners at the time of examination.

The two papers and the two practicals shall deal with the subjects as follows:—

Paper I: Non-chordates, Cytology, Histology.

Paper II: Chordates, Embryology, Evolution and Genetics.

Practical I: Non-chordates: Dissection, preparation of temporary mounts and identification of specimens.

Practical II: Chordates: Dissection, preparation of temporary mounts and identification of specimens.

(Note: Detailed dissections such as the exposition of cranial nerves or sense organs, are not expected. Candidates should be able to identify common specimens belonging to the groups mentioned under systematic Zoology).

As a Principal Subject

A detailed study of the Subsidiary B.Sc. Course and of the following: Cytology Evolution and Genetics, Vertebrate Histology, General Phipiology, Embryology, distribution of animals in space and time, sysmatic Zoology. Four papers and four practical examinations, each of 75 marks.

3. Bachelor of Engineering Scheme of Examinations/Teaching Schedules

The B.Engg. Scheme of Examinations and Teaching Schedules that follow are from the **Scheme of Examinations & Syllabi for Bachelor of Engineering Examinations (Curl, Electrical & Mechanical)—Thapar College of Engineering,** Punjabi University.

SCHEME OF EXAMINATIONS IN ENGINEERING
FIRST EXAMINATION IN ENGINEERING

(Common to all branches)

(Part I Examination)	EXAMINATION			SESSIONAL WORK	
	Hours	Theory Marks	Pract./Viva	Theory Marks	Practical
Ist Semester					
Ma 101 Mathematics I	3	100	—	50	—
Ph 101 Physics	2	50	—	—	—
Ch 101 Applied Chemistry	2	50	—	—	—
ME 101 Geometrical Drawing & Graphic Statics	4	100	—	50	—
CE 101 Surveying	3	100	20	40	40
Total		400	20	140	40
Grand Total					600
(Part II Examination)					
IInd Semester					
Ma 102 Mechanics	3	100	20	40	40
Ph 102 Physics	2	50	20	40	40
Ch 102 Applied Chemistry	2	50	20	40	40
ME 102 Machine Drawing	4	100	—	50	—
ME 103 Workshop Practice	—	—	50	—	100
Hu 101 English	3	100	—	50	—
General Fitness	—	—	—	—	50
Total		400	110	220	270
Grand Total					1000
Total of Part I & Part II	—	—	—	—	1600

SECOND EXAMINATION IN ENGINEERING (CIVIL)

(Part I Examination)	EXAMINATION			SESSIONAL WORK	
	Hours	Theory Marks	Pract./Viva	Theory Marks	Practical
Ist Semester					
CE 201 Structural Analysis I	3	100	—	40	—
EE 203 Elect. Tech. III	3	100	20	40	30
ME 208 Mechanical Engg.	3	100	20	30	30
ME 204 Strength of Materials	3	100	20	40	30
Total		400	60	150	90
Grand Total					700

(Part II Examination)
IInd Semester

CE 202 Engg. Design & Drawing	2	50	30	—	40
CE 203 Building Materials & Constn.	3	100	—	40	—
CE 204 Hydraulics	3	100	20	20	20
CE 205 Surveying II	3	100	20	20	40
Ma 201 Mathematics II	3	100	—	50	—
General Fitness	—	—	—	—	50
Total		450	70	130	150
Grand Total					800
Total of Part I & Part II	—	—	—	—	1500

SECOND EXAMINATION IN ENGINEERING (ELECTRICAL)

(Part I Examination)
Ist. Semester

ME 202 Prime Movers	3	100	20	40	30
ME 204 Strength of Materials	3	100	20	40	30
ME 205 Workshop Tech. II	2	50	30	—	50
EE 201 Elect. Tech. I	3	100	20	40	30
Total		350	90	120	140
Grand Total					700

	EXAMINATION			SESSIONAL WORK	
(Part II Examination)	Hours	Theory Marks	Pract./Viva	Theory Marks	Practical
IInd Semester					
Ma 201 Mathematics II	3	100	—	40	—
ME 201 Applied Mechanics	3	100	—	40	—
ME 207 M/c Drawing II	4	100	—	40	—
EE 202 Elect. Tech. II	3	100	20	40	30
CE 206 Theory & Design of Structures	3	100	—	40	—
General Fitness	—	—	—	—	50
Total		500	20	200	80
Grand Total					800
Total of Part I & Part II	—	—	—	—	1500

SECOND EXAMINATION IN ENGINEERING (MECHANICAL)

(Part I Examination)

Ist Semester

ME 201 Applied Mechanics	3	100	20	40	30
ME 203 Strength of Materials I	3	100	20	40	30
ME 205 Workshop Tech. II	2	50	30	—	50
EE 201 Electrical Tech. I	3	100	20	40	30
Total		350	90	120	140
Grand Total					700

(Part II Examination)

IInd Semester

Ma 201 Mathematics II	3	100	—	40	—
ME 206 Thermodynamics & Heat Transfer	3	100	—	40	—
ME 207 Machine Drawing II	4	100	—	40	—
EE 202 Elect. Tech. II	3	100	20	40	30
CE 206 Theo. & Design of Structures	3	100	—	40	—
General fitness	—	—	—	—	50
Total		500	20	200	80
Grand Total					800
Total of Part I & Part II	—	—	—	—	1500

Survey Camp for Civil Engineering students and Workshop training for Electrical and Mechanical Engineering students during summer vacation after Part II of Second examination in Engineering.

THIRD EXAMINATION IN ENGINEERING (CIVIL)

	EXAMINATION			SESSIONAL WORK	
(Part I Examination)	Hours	Theory Marks	Pract./Viva	Theory Marks	Practical
Ist Semester					
CE 301 Irrigation	3	100	20	20	40
CE 302 Structural Design I	3	100	20	—	50
CE 303 Transportation Engineering	3	100	20	—	30
CE 304 Municipal Engineering	3	100	—	50	—
Hu 301 Principles of Government	2	50	—	—	—
Total		450	60	70	120
Grand Total					700

(Part II Examination)
IInd Semester

CE 305 Struct. Analysis II	3	100	—	50	20
CE 306 Struct. Design II	3	100	20	40	40
CE 307 Soil Mechanics	3	100	20	30	30
CE 308 Engineering Geology	3	100	—	20	30
*Pract. Surveying & Camp	—	—	20	—	30
General fitness	—	—	—	—	50
Total		400	60	140	200
Grand Total					800
Total of Part I & Part II	—	—	—	—	1500

THIRD EXAMINATION IN ENGINEERING (ELECTRICAL)

(Part I Examination)
Ist Semester

MA 301 Advanced Mathematics	3	100	—	50	—
EE 301 Electric Circuits	3	100	—	50	—
EE 302 Electrical Measurements & Measuring Instruments	3	100	20	40	40
EE 30 Mag. & Dielectric Phenomena OR Ph 301Advanced Physics	3	100	—	50	—
Hu 301 Principles of Government	2	50	—	—	—
Total		450	20	190	40
Grand Total					700

(Part II Examination)
IInd Semester

ME 306 Hydraulics & Hyd. Machines	3	100	20	30	40
EE 304 Electrical Machines I	3	100	20	30	40
EE 305 Elect. & Instrumentation	3	100	20	30	40
EE 306 Power System I	3	100	—	30	—
*Workshop Training	—	—	—	—	50
General fitness	—	—	—	—	50
Total		400	60	120	220
Grand Total					800
Total of Part I & Part II	—	—	—	—	1500

THIRD EXAMINATION IN ENGINEERING (MECHANICAL)

(Part I Examination)					
Ist Semester					
Ch 301 Metallurgy	3	100	—	50	—
ME 301 Dynamics of Machines	3	100	—	50	—
ME 302 Workshop Tech. III	2	50	30	—	70
ME 303 Machine Design I	3	100	30	70	—
Hu 301 Principles of Government	2	50	—	—	—
Total		400	60	170	70
Grand Total					700
(Part II Examination)					
IInd Semester					
ME 304 Indust. Engineering & Economics	3	100	—	50	—
ME 305 Fluid Mechanics	3	100	20	40	40
ME 307 Applied Thermo-dynamics I	3	100	20	40	40
ME 308 Strength of Materials II	3	100	—	—	50
*Workshop Training	—	—	—	—	50
General fitness	—	—	—	—	50
Total		400	40	180	180
Grand Total					800
Total Part I & Part II	—	—	—	—	1500

Training at Works for 8 weeks shall be arranged by the College during vacation after the Part II of Third Examination in Engineering.

*Marks for work done in the Survey Camp at Workshop Training after the Part II of Second Examination in Engineering.

FINAL EXAMINATION IN ENGINEERING (CIVIL)

	EXAMINATION			SESSIONAL WORK	
(Part I Examination)	Hours	Theory Marks	Pract./Viva	Theory Marks	Practical
Ist Semester					
CE 401 Professional Practice	2	50	—	40	60
CE 402 Reinforced Concrete (Drawing & Design)	3	100	20	40	40
CE 403 Bridge Engineering	3	100	—	40	60
ELECTIVE 'A' (Any one)	3	100	—	50	—
CE 404 Advanced Surveying					
CE 405 Water Power Engg. & Waterways					
CE 406 Building Const. & Town Planning					
Ma 301 Advanced Mathematics					
Total		350	20	170	160
Grand Total					700

(Part II Examination)					
IInd Semester					
CE 407 Steel Design & Drawing	3	100	20	40	40
CE 408 Structural Theory	3	100	—	50	—
ELECTIVE 'B' (Any one)	3	100	—	50	—
CE 409 Dam Construction					
CE 410 Highway Engineering					
CE 411 Public Health Engineering					
CE 412 Project (Compulsory) on the Elective 'B'	—	—	50	100	—
Hu 401 Humanities & Social Studies	2	50	—	—	—
*Training & Tour Report	—	—	—	—	50
General fitness	—	—	—	—	50
Total		350	70	240	140
Grand Total					800
Total of Part I & Part II	—	—	—	—	1500

FINAL EXAMINATION IN ENGINEERING (ELECTRICAL)

	EXAMINATION			SESSIONAL WORK	
(Part I Examination)	Hours	Theory Marks	Pract./Viva	Theory Marks	Practical
Ist Semester					
EE 401 Electrical Machine II	3	100	20	40	40
EE 402 Power System II	3	100	—	50	—
EE 403 Electrical Communication	3	100	20	40	40
EE 404 Utilisation of Electric Power including Traction	3	100	20	60	—
Total		400	60	190	80
Grand Total					730
(Part II Examination)					
IInd Semester					
ME 304 Industrial Engg. & Economics	3	100	—	20	—
EE 405 Principles of Elect. M/cs.	4	100	30	70	—
EE 406 Control Systems or Design					
EE 407 Elect. Machines III or)	3	100	—	50	—
EE 408 Power Systems III					
EE 409 Project	—	—	50	100	—
Hu 401 Humanities & Social Studies	2	50	—	—	—
*Training & Tour Report	—	—	—	—	50
General fitness	—	—	—	—	50
Total		350	80	240	100
Grand Total					770
Total of Part & Part II	—	—	—	—	1500

FINAL EXAMINATION IN ENGINEERING (MECHANICAL)

(Part I Examination)
Ist Semester

ME 401 Fluid Machinery	3	100	20	40	40
ME 402 Applied Thermo. II	2	100	20	40	40
ELECTIVE 'A' (Any One)					
ME 301 Advanced Mathematics					
Ph 301 Advanced Physics	3	100	—	50	—
Ma 401 Probability & Statistics					

	EXAMINATION			SESSIONAL WORK	
(Part I Examination)	Hours	Theory Marks	Pract./Viva	Theory Marks	Practical
Ist Semester					
ELECTIVE 'B' (One)	3	100	—	50	—
ME 403 Advanced Thermodynamics					
ME 404 Gas Dynamics					
ME 405 Advanced Heat Transfer					
ME 406 Mech. **Vibrations**					
ME 407 Production **Planning** & Control					
Total		400	40	180	80
Grand Total					700
(Part II Examination)					
IInd Semester					
ME 408 Strength of Materials III	3	100	—	40	—
ME 409 Machine Design II	4	100	30	50	—
ELECTIVE 'C' (One)	3	100	20	30	30
ME 410 Steam & Gas Turbines					
ME 411 I. C. Engines					
ME 412 Refgn. & **Air Conditioning**					
ME 413 Experimental Stress Analysis					
ME 414 **Workshop Tech. IV**					
ME 415 Automotive Engg.					
ME 416 Project (Compulsory)	—	—	50	100	—
Hu 401 Humanities & Social Studies	2	50	—	—	—
*Training & Tour Report	—	—	—	—	50
General fitness	—	—	—	—	50
Total		350	100	220	130
Grand Total					800
Total of Part I & Part II	—	—	—	—	1500

*Marks for the work done during training at Works after Part II of Third Examination in Engineering and Report of the Educational Tour during the Final year.

TEACHING SCHEDULE

FIRST EXAMINATION IN ENGINEERING

(Common to all branches)

Ist Semester	L	T	P	D	Total
Ma 101 Mathematics I	4	3	—	—	7
Ph 101 Physics	3	1	2	—	6
Ch 101 Applied Chemistry	2	1	2	—	5
ME 101 Geometrical Drawing & Graphic Statics	2	—	—	8	10
CE 101 Surveying	4	—	6	—	10
Hu 101 English	2	—	—	—	2
Total	17	5	10	8	40

II Semester					
Ma 102 Mechanics	4	3	2	—	9
Ph 102 Physics	3	1	2	—	6
Ch 102 Applied Chemistry	2	1	2	—	5
ME 102 Machine Drawing	2	—	—	8	10
ME 103 Workshop Practice	2	—	8	—	10
Hu 101 English	2	—	—	—	2
Total	15	5	14	8	42

SECOND EXAMINATION IN ENGINEERING (CIVIL)

Ist Semester					
CE 201 Struct. Analysis I	4	3	—	—	7
EE 203 Elect. Tech. III	4	3	3	—	10
ME 208 Mechanical Engg.	5	3	3	—	11
ME 204 Strength of Materials	4	3	3	—	10
Total	17	12	9	—	38

IInd Semester					
CE 202 Engg. Design & Drawing	—	3	—	5	8
CE 203 Buildg. Matls. & Construction	4	3/2	—	—	5½
CE 204 Hydraulics	4	3	3/2	—	8½
CE 205 Surveying II	4	—	6	—	10
Ma 201 Mathematics II	4	3	—	—	7
Total	16	10½	7½	5	39

SECOND EXAMINATION IN ENGINEERING (ELECTRICAL)

Ist Semester					
ME 202 Prime Movers	4	3	3	—	10
ME 204 Strength of Materials	4	3	3	—	10
ME 205 Workshop Tech. II	2	—	8	—	10
EE 201 Elect. Tech. I	4	3	3	—	10
Total	14	9	17	—	40

IInd Semester	L	T	P	D	Total
MA 201 Mathematics II	4	3	—	—	7
ME 201 Applied Mechanics	4	3	—	—	7
ME 207 Machine Drawing II	2	—	—	6	8
EE 202 Elect. Tech. II.	4	3	3	—	10
CE 206 Theory & Design of Structures	4	3	—	—	7
Total	18	12	3	6	39

SECOND EXAMINATION IN ENGINEERING (MECHANICAL)

Ist Semester					
ME 201 Applied Mechanics	4	3	3	—	10
ME 203 Strength of Materials I	4	3	3	—	10
ME 205 Workshop Tech. II	2	—	8	—	10
EE 201 Elect. Tech. I	4	3	3	—	10
Total	14	9	17	—	49

IInd Semester					
Ma 201 Mathematics II	4	3	—	—	7
ME 206 Thermo. & Heat Transfer	4	3	—	—	7
ME 207 Machine Drawing II	2	—	—	6	8
EE 202 Elect. Tech. II	4	3	3	—	10
CE 206 Theory & Design of Structures	4	3	—	—	7
Total	18	12	3	6	39

THIRD EXAMINATION IN ENGINEERING (CIVIL)

Ist Semester					
CE 301 Irrigation	4	3/2	—	3	8½
CE 302 Struct. Design I	4	3/2	—	3	8½
CE 303 Transportation Engineering	4	3/2	3/2	—	7
CE 304 Municipal Engineering	4	3	—	—	7
Hu 301 Principles of Government	2	—	—	—	2
Pract. Surveying	—	—	3	—	3
Total	18	7½	4½	6	36

IInd Semester					
CE 305 Struct. Analysis II	4	3	—	3/2	8½
CE 306 Struct. Design II	4	3/2	3/2	3	10
CE 307 Soil Mechanics	4	3	3/2	—	8½
CE 308 Engg. Geology	4	—	3	—	7
Total	16	7½	6	4½	34

THIRD EXAMINATION IN ENGINEERING (ELECTRICAL)

Ist Semester					
Ma 301 Advanced Mathematics	4	3	—	—	7
EE 301 Electrical Circuits	4	3	—	—	7
EE 302 Electrical Measurements & Measuring Instruments	4	3	3	—	10

	L	T	P	D	Total
EE 306 Mag. & Dielectric Phenomena					
OR					
Ph 301 Advanced Physics	4	3	—	—	7
Hu 301 Principles of Government	2	—	—	—	2
Total	18	12	3	—	33
IInd Semester					
ME 306 Hydraulic & Hyd. Machines	4	3	3	—	10
EE 304 Electrical Machines I	4	3	3	—	10
EE 305 Electronics & Instrumentation	4	3	3	—	10
EE 306 Power System I	4	3	—	—	7
Total	16	12	9	—	37

THIRD EXAMINATION IN ENGINEERING (MECHANICAL)

	L	T	P	D	Total
Ist Semester					
Ch. 301 Metallurgy	4	1	2	—	7
ME 301 Dynamics of Machines	4	3	—	—	7
ME 302 Workshop Tech. III	2	—	8	—	10
ME 303 Machine Design I	4	—	—	8	12
Hu 301 Principles of Government	2	—	—	—	2
Total	16	4	10	8	38
IInd Semester					
ME 304 Indust. Engineering & Economics	5	2	—	—	7
ME 305 Fluid Mechanics	4	3	3	—	10
ME 307 Applied Thermodynamics I	4	3	3	—	10
ME 308 Strength of Materials II	4	3	—	—	7
Total	17	11	6	—	34

FINAL EXAMINATION IN ENGINEERING (CIVIL)

	L	T	P	D	Total
Ist Semester					
CE 401 Professional Practice	4	3	—	—	7
CE 402 Reinforced Concrete (Drawing & Design)	4	3	—	3	10
CE 403 Bridge Engineering	4	3	—	3	10
ELECTIVE 'A' (Any One)	4	3	—	—	7
CE 404 Adv. Surveying					
Ch 405 Water Power Engineering & Waterways					
CE 406 Building Construction & Town Planning					
Ma 401 Adv. Mathematics					
Total	16	12	—	6	34

IInd Semester	L	T	P	D	Total
CE 407 Steel Design & Drawing	4	3	—	3	10
CE 408 Structural Theory	4	3/2	—	3/2	7
ELECTIVE 'B' (Any One)	4	3	—	—	7
CE 409 Dam Construction					
CE 410 Highway Engineering					
CE 411 Public Health Engineering					
CE 412 Project (Compulsory) on the Elective (B)	—	—	—	9	9
Hu 401 Humanities & Social Studies	2	—	—	—	2
Total	14	7½	—	13½	35

FINAL EXAMINATION IN ENGINEERING (ELECTRICAL)

Ist Semester	L	T	P	D	Total
EE 401 Electrical Machine II	4	3	3	—	10
EE 402 Power System II	4	3	—	—	7
EE 403 Electrical Communication	4	3	3	—	10
EE 404 Utilization of Electric Power including Traction	4	3	—	3	10
Total	16	12	6	3	37

IInd Semester	L	T	P	D	Total
ME 304 Industrial Engg. & Economics	5	2	—	—	7
EE 405 Design Principles of Elect. Machine	2	—	—	8	10
EE 406 Control Systems OR EE 407 Electrical Machines III (Generalized M/c Theory) OR EE 408 Power Systems III (System operation & Design)	4	1	2	—	7
EE 409 Project	—	—	—	9	9
Hu 401 Humanities & Social Studies	2	—	—	—	2
Total	13	3	2	17	35

FINAL EXAMINATION IN ENGINEERING (MECHANICAL)

Ist Semester	L	T	P	D	Total
ME 401 Fluid Machinery	4	3	3	—	10
ME 402 Applied Thermodynamics II	4	3	3	—	10
ELECTIVE 'A' (Any One)	4	3	—	—	7
ME 301 Advanced Mathematics					
Ph 301 Advanced Physics					
Ma 401 Probability & Statistics					
ELECTIVE 'B' (Any One)	4	3	—	—	7
ME 403 Advanced Thermodynamics					
ME 404 Gas Dynamics					
ME 405 Advanced Heat Transfer					
ME 406 Mechanical Vibrations					
ME 407 Production Planning & Control					
Total	16	12	6	—	34

IInd Semester	L	T	P	D	Total
ME 408 Strength of Materials II	4	3	—	—	7
ME 409 Machine Design II	2	—	—	8	10
ELECTIVE 'C' (Any One)	4	3	3	—	10
ME 410 Steam & Gas Turbines					
ME 411 I. C. Engines					
ME 412 Refgn. & Air Conditioning					
ME 413 Experimental Stress Analysis					
ME 414 Workshop Tech. IV					
ME 415 Automotive Engineering					
ME 416 Project (Compulsory)	—	—	—	9	9
Hu 401 Humanities & Social Studies	2	—	—	—	2
Total	12	6	3	17	38

4. Bachelor of Education Scheme of Examination/Syllabus of Study

The B.Ed. Scheme of Examination and Syllabus of Study that follow have been taken from Part VIII, Faculty of Education **University of Rajasthan Ordinances, Regulations, Text-Books & Syllabuses 1969.** For Papers IV and V of that examination Mathematics has been chosen as one of the subjects to be illustrated partly so that the scope of secondary school mathematics may be seen.

SCHEME OF EXAMINATION

B. Ed. Examination (Theory)

The division at the B. Ed. Examination shall be assigned for Theory and Practice as follows:—

First Division 60%) of the aggregate marks in theory
(including sessional work) and
Second Division 48%) practice separately.

All the rest in the Third Division, if they obtain minimum pass marks, 36 per cent, in aggregate in Theory including sessional work, with a minimum of 30 per cent in each paper and 40 per cent in Practice.

The allotment of marks in each paper is as follows:—

Paper I—Philosophical and Sociological Foundations of Education and Principles of School Organization. 75 Marks.
Sessional Work. 25 Marks.
Paper II—Psychological Foundations of Education and Evaluation. 75 Marks.
Sessional Work. 25 Marks.
Paper III—Problems of Indian Education and Health Education. 75 Marks.
Sessional Work. 25 Marks.
Paper IV & V—Principles and Methods of Teaching: two school subjects each paper. 75 Marks.
Sessional Work in Each paper. 25 Marks.

Note: The sessional work of 25 marks in each paper will consist of periodical tests and essays. It shall be assessed internally by the Principal and the staff members and sent to the University by 7th April every year. The marks obtained by each candidate in the internal assessment will be added to his marks obtained by him in theory papers examined externally. The candidate's success in each theory paper will depend upon a minimum of 30% marks in the external examination and the internal assessment seperately.

B. Ed. Examination (Practice of Teaching)

1. The practical examination will consist of the following: External Examination of 150 marks and (B) an internal assessment of 50 marks. Every candidate will have to pass in the external examination and internal assessment separately by getting at least 40% marks in each. For getting second and first divisions a candidate will have to obtain a minimum of 48% and 60% marks respectively out of the combined marks of the external examination and internal assessment, i.e., 20 marks. The award of marks in both the external examination and the internal assessment will be mentioned separately in the result sheet.

2. There will be a Board of examiners for the external examination for each college which will examine each candidate in both or one of the two subjects offered by him (one lesson for each subject).

The Board will consist of the following:—

(a) The Principal of the college concerned.

(b) A Principal or senior and experienced member of the staff of another training college affiliated to the Rajasthan University.

(c) One external examiner from outside the University or Principal of an affiliated Training College.

3. The internal assessment will be prepared by the Principal with the help of his staff members on the basis of the whole year's work of each student and will be sent to the University by 31st January each year.

B. Ed. Examination (Special Course)

Paper VI

The paper will consist of 100 marks, out of which 50 marks will be reserved for sessional work consisting of 20 marks for two tests and the remaining 30 for the rest. Minimum pass marks will be 40 percent with a minimum of 15 marks in theory and sessional work separately. For distinction 75 per cent marks shall be the minimum.

Sessional work in paper VI will consist of two written tests of at least 45 minutes duration carrying 20 marks and the remaining 30 marks for practical work, field study, written work essays etc. required in the paper. Sessional work shall be internally evaluated. A complete record of the sessional work and its assessment shall be maintained by the Principals of the colleges concerned.

B. Ed Examination

Syllabus of Study

1. General Objectives:

(1) To develop the following personal qualities: Pleasing personality, good voice, courteous manners, humility, simplicity, open and broad mindedness, critical thinking, fearlessness, perseverance, conscientiousness, diligence, orderliness, sincerity, devotion to duty, adaptability, emotional stability, sense of humour, self-confidence, sense of responsibility, freedom from frustration and missionary zeal.

(2) To develop the following social qualities:
Truthfulness, honesty, impartiality, firmness of discipline, strength of character, tolerance, love, sympathy, obedience, leadership, nationalistic and democratic outlook.
(3) Interest in activities of children and community welfare.
(4) Interest in continuous personal and professional growth of self.
(5) To develop attitude of sympathy and understanding towards children.
(6) To develop attitude of friendliness and cooperation towards the community, students, parents, Colleges and the State.
(7) To develop attitude of experimentation and research in educational programmes and problems.
(8) To develop attitude of subordinating personal interest to the larger good of the pupils and the school.
(9) To develop a healthy and positive attitude towards the profession.

PAPER I—PHILOSOPHICAL AND SOCIOLOGICAL FOUNDATION OF EDUCATION AND PRINCIPLES OF SCHOOL ORGANIZATION.

Objectives

1. **A-Philosophical & Sociological Foundations of Education.**

(a) Knowledge and Understanding.

(1) The Meaning and Nature of Education.
(2) The Relationship of Philosophy and Education.
(3) The Relationship between Education and the Social Order.
(4) The Role of Education in Social Change.
(5) The factors generating the aims and objectives of education.
(6) The basic values of Indian society.
(7) The effect of the Western and Indian Philosophy of Education on the aims and objectives of education for our society.
(8) The effect of the Western and Indian Philosophy of Education on the curriculum methods of teaching, the role of the teacher and discipline of children.
(9) The origin and functions of the school and its relationship with the informal agencies of education, such as the home, community, state and religion.

(b) Abilities and Skills.

(1) Ability to formulate educational policies in consonance with our educational philosophy.
(2) Ability to lay down educational programmes and activities for the transmission of our cultural values and heritage to the younger generation.
(3) Ability to translate into action the aims and objectives of education.
(4) Ability to inculcate proper discipline among the children.
(5) Ability to stimulate children to improve our society in the light of the cultural, economic and political challenge of our times.

Syllabus:

(1) Meaning of Education.
(2) Relationship of Philosophy and Education.

(3) Relationship of Sociology and Education.
(4) Naturalism, Idealism and Pragmatism, Gandhism and Shanker's Vedant in Education and their scope and implications regarding
  (a) Aims of Education (b) Contents of Education (c) Methods of Education.
(5) Scope and implications of Educational Sociology.
  Education as an instrument for:
  (a) Conservation and development of culture (b) Social change (c) Economic growth and development.
(6) The place of Social Order in Education, Family, Peergroup, Community, State.
(7) Education for a changing society in India.
  (a) Modernization-economic, industrial, technological, democratic society (b) National integration (c) Leisure (d) International understanding.

[Although the editor is aware that this is not in proper bibliography form, it is reported as taken from the Indian reference.]

Bibliography

1. Broudy: Building a Philosophy of Education. Prentice Hall of India Pvt. Ltd.
2. Sir Percy Nunn: Education, Its Data and First Principles.
3. Dewey, John: Democracy and Education, Macmillan Co., New York.
4. Ross: Groundwork of Educational Theory.
5. Ottaway: Education & Society.
6. Butler: The Four Philosophies of Education.
7. Horne: The Democratic Philosophy of Education. Macmillan Company, New York.
8. Mathur S.S.: A Sociological Approach to Indian Education. Vinod Pustak Mandir, Agra.
9. Gaind & Sharma: Shiksha Ke Darshnik Siddhant.
10. Prem Nath: The Basis of Education. Lahore, University Publishers.
11. Chaube: Shiksha Siddhant.
12. Shrimali K.L.: Education in Changing India. Asia Publishing House, Bombay.
13. Taneja: Education Thought & Practice.

2. B-Principles of School Organization

Objectives

(a) Knowledge and Understanding

(1) The need for organizing a school.
(2) The principles of democratic school organization and administration.
(3) The roles of a teacher, headmaster and the management in organizing a school.
(4) The human relationships involved and expected in a modern school in the light of our educational philosophy, namely, the relationship between the department, guardians, headmaster, teachers and pupils.
(5) The educational programme (including curricular and cocurricular activities) of a school in the context of our educational philosophy.

(6) The admission classification and promotion of pupils.
(7) The various types and functions of schools and pupils records.
(8) The plans of school site and buildings.
(9) The techniques of time-table framing.
(10) The procedures of democratic supervision and inspection.
(11) The assessment of teachers' qualities and work.
(12) The over-all assessment of a school and suggestions for its improvement.

(b) Abilities and Skills.

(1) Ability to judge and maintain the school plant in good working order.
(2) Ability to prepare time-tables, work-schedules etc.
(3) Ability to maintain records and registers.
(4) Ability to use the records effectively.
(5) Ability to maintain good human relationships.
(6) Ability to organize and conduct seminars, workshops, conferences, etc.
(7) Ability to evaluate teacher effectiveness and offer suitable guidance.
(8) Ability to organize and execute plans for continuous self-growth.

Syllabus:

(1) The headmaster and the staff.
(2) Time table arrangement and balance of subjects: Principles of time-table framing.
(3) Organization of co-curricular activities in schools, philosophy as the determinant of particular mode of organization; pupil self-government; education for citizenship.
(4) School as the center of community life.
(5) Discipline, rewards and punishment.
(6) Study of promotion rules, cumulative records and office records and teachers' diaries with special reference to the Rajasthan Education Code.

[Although the editor is aware that this is not in proper bibliography form, it is reported as taken from the Indian reference.]

Bibliography

1. Report of the Secondary Education Commission, 1953.
2. Mohiuddin M. S.: School Organization and Management: West Pakistan Publishing Co. Urdu Bazar, Lahore.
3. Vidyalaya Sangthan by Atma Ram Sharma, Gaya Prasad & Sons. Agra.
4. Gaind & Sharma: Madhyamik Shikshalaya Vyavastha, Ram Prasad & Sons.
5. Report of the Indian Education Commission (1964-66).

PAPER II—PSYCHOLOGICAL FOUNDATION OF EDUCATION AND EVALUATION

Objectives:

(a) Knowledge and Understanding

(1) The significance of Psychology for the teacher.

(2) The factors contributing to the growth and development of the child and the nature of development of the child and the adolescent.
(3) Children's needs, motives and growth pattern and their relationship to educational programmes and procedures.
(4) The nature of learning, methods and principles of learning, transfer of learning.
(5) The development of abilities and skills and the formation of interests and attitudes.
(6) The problems of secondary school pupil in the context of the psychology of child development.
(7) The principles of mental health and their application to the education of children and the personal life of the teacher.
(8) The group dynamics of instructional and informal groups.
(9) The nature of individual differences and providing for them in educational programmes. Elementary Principles of Educational and Vocational Guidance.
(10) Exceptional children and ways of dealing with them.
(11) Psychological tests and techniques of evaluation.

(b) Abilities and skills.

(1) Ability to analyze individual differences.
(2) Ability to formulate educational programmes and methods according to individual differences.
(3) Ability to understand pupils' needs and interests.
(4) Ability to apply knowledge of group-psychology to teaching-learning.
(5) Ability to select and administer psychological tests of intelligence, personality and achievement etc. and to interpret scores.
(6) Ability to classify and analyze data obtained from tests for guidance and remedial purposes.

Syllabus:

Section A

(1) Psychology as a Discipline, Meaning and Nature of Psychology, Psychology as a Science of Behaviour.
(2) Child Growth and Development
  I. Nature and Significance of Growth and Development.
  II. Phsysiological and Biological Determinants of Growth and Development (Nervous system, Glandular system and Hereditary).
  III. Heredity and Environment as Relative Factors of Growing and Development.
  IV. Physical and Mental Development.
  V. Social and Emotional Development.
(3) Learning
  I. General Nature of Learning: The Process of Learning Various Theories (Trial and Error, Conditioning and Insight), Thorndike's Principles and Laws of Learning.
  II. Motivation and Learning.
  III. Transfer of Learning.
  IV. Factors of Effective Learning.
  V. Reasoning and Problem Solving.
  VI. Individual Differences: implications, significance in learning.

(4) Personality
- I. General Nature and Its Characteristics.
- II. Different Dimensions of Personality (Physical, Mental, Social and Emotional): Their inter-relationship—the totality and unity of personality.
- III. Different Approaches to Understand Personality.
- IV. Measurement of Personality Various Testing and Non-Testing Techniques.

(5) Adjustment of Personality and Guidance.
- I. Meaning and Nature of Adjustment.
- II. Concept of Mental Health and Hygiene.
- III. Various Ways of Adjustment: Defence Mechanisms (Compensation, Rationalization, Identification, Projection, Repression, Withdrawal etc.)
- IV. Behavioural Disorders and Maladjustments of Personality, Nature, Classification and Causes.
- V. Role of Educational Agencies in the Mental Health of School Children.
- VI. Guidance of Exceptional and Maladjusted Children.

[Although the editor is aware that this is not in proper bibliography form, it is reported as taken from the Indian reference.]

Bibliography

1. Bhatnagar, R. P., 'A Study of Educational Psychology,' Vishwa-Vidhyalaya Prakashan, Gorakhpur, U. P.
2. Blair, Jones and Simpson: Educational Psychology. Macmillan, New York.
3. Burnbury, Balint and Yapp; An Introduction to Child Guidance.
4. Lindgren: Educational Psychology in the Class-room. Macmillan.
5. Skinner: Essentials of Educational Psychology, Asia Pub. House, Bombay.
6. Srivastava, S. N.: Educational Psychology; Youngman and Co., Nai Sarak, Delhi.
7. Sorensen: Psychology in Education, McGraw-Hill, New York.
8. Valentine: Psychology and Its Bearing on Education; Metheun, London.
9. Psychology, a study of mental life by Woodworth (Hindi translation)
10. Shiksha Monovygyam by Suresh Bhatnagar, Loyal Book Depot, Meerut.
11. S. S. Mathur: Shiksha Manovigyan, Agra: Vinod Pustak Mandir.

Section B
Evaluation

Objectives:

A. Acquisition of knowledge of
- I. The examination system of India; its history and reform movement.
- II. Concept of educational measurements and evaluation.
- III. Techniques and tools of evaluation.
- IV. Different forms of questions and test-items.

B. Application of knowledge to
- I. The preparation of tools of evaluation.
- II. Critical appraisal of examination procedure.

C. Development of Skills in

I. Writing test items.
II. Preparing objective-based question papers.
III. Administration, scoring and interpretation of test-scores.
IV. Preparing unit-tests and complete papers.

Syllabus:

(1) Present System of Examination: Its history, merits and demerits, attempts for improvement.

(2) The Concept of Evaluation, relation to educational objectives, Significance of educational objectives as related to evaluation, Defining and formulating educational objectives, Characterized advantages of modern evaluation.

(3) Elementary Statistics in Measurement: Measures of Central Tendency and Variability, Rank-order Correlation. Definitions or concepts only of reliability and validity of tests.

(4) Techniques and Tools of evaluation: Classification of techniques (Testing and Non-testing Techniques), Construction of Psychological Tests-Types of objective-type tests (Intelligence, Achievement, Aptitude, Interest, Personality and Diagnostic tests.)

(5) Planning A Question Paper.

Practical Work:

1. Working out statements of instructional objectives & their specifications in the subjects shown as special methods (group work).
2. Construction of objective-based questions of different types-essay, short-answer and objective type (50 in all covering a number of objectives).
3. Construction of one unit test on a selected unit of teaching. Tryout and analysis of test results.
4. Preparation of the design and blue print of a full question paper.

[Although the editor is aware that this is not in proper bibliography form, it is reported as taken from the Indian reference.]

Bibliography

1. Anastasi: Psychological Testing.
2. Bhatnagar, R. P. 'Shiksha Tatha Manovigyan Men Sankhiki,' Shabda Sancher, Ajmer (Raj.)
3. Green, Jorgensom Measurement & Evaluation in Secondary School.
4. Garrett: Statistics in Psychology and Education.
5. Pandey—Shiksha men Saral Sankhiki, Vinod Pustak Mandir, Agra.
6. Agrawal-Manovigyan Aur Shiksha men mapan avom-Muliyankan: Vinod Pustak Mandir, Agra.
7. Adhunik Shiksha Men Mulyankan. Rightsone, Justman, Robins (Uresia Publishing House Pvt. Ltd., Ram Nagar, New Delhi-1.)
8. Saririk Athva Manovigyanik Mapan by A. R. Sharma (Shiv Lal Agrawal & Co. Ltd., Agra).
9. Shiksha Men Mapan Avumulynkan by Dr. Pandey (Laxmi Narayan Agarwal Pustak Prakashan, Agra-3).

PAPER III—PROBLEMS OF INDIAN EDUCATION & HEALTH EDUCATION

Objectives:

(a) Knowledge and Understanding.

(1) A bird's eye view of Ancient Indian Education.

(2) The present conditions of Primary and Secondary Education in India, their defects and shortcomings as compared to the U. K., U. S. A. and U. S. S. R.

(3) The following specific problems in relation to Primary and Secondary Education:

- (a) The needs of exceptional and handicapped children.
- (b) Wastage and stagnation in education.
- (c) Personal and social adjustment, discipline and freedom.
- (d) Educational and Vocational Guidance.
- (e) Professional problems of secondary school teachers and their training.
- (f) Religious education in a secular state.
- (g) Emotional and national integration.
- (h) Women's Education.
- (i) Technical Education.

(b) Abilities and skills

(1) Ability to understand and appreciate merits and demerits of contemporary educational planning and administration.

(2) Ability to criticize and suggest improvements regarding current aims, curriculum, methods and administration.

(3) Ability to understand and appreciate the problems of National Education and suggest practical measures for improvement.

Syllabus: Section A. Problems of Indian Education.

(1) (a) An overview of Indian Education—Ancient and Modern.
    (b) An overview of education abroad—U. S. A., U. K. and U. S. S. R. Historical development-pattern of education at different levels.

(2) Elementary Education
    (a) Constitutional provision for Universal Compulsory education—its implications—problems faced in implementation—the curriculum and the programme of Basic Education—administration and supervision of primary education.
    (b) Special problems—
        (i) The disparity in enrollment of
            (a) girls and boys in various regions &
            (b) different socio-economic groups, castes and tribes of the country
        (ii) Wastage and stagnation.
        (iii) Single teacher schools.

(3) Secondary Education
    (a) Objectives of secondary education—secondary education as an end in itself and/or as preparatory to higher education—structure

of secondary education—administration and supervision of secondary education (both Government and privately managed).

- (b) Special problems.
  - (i) The curriculum and diversification.
  - (ii) The need for examination reforms and better methods of evaluation.
  - (iii) Guidance.
- (4) Higher Education.
  - (a) Expansion of University education in India.
  - (b) Special problems.
    - (i) The problem of selection.
    - (ii) The problem of standards.
    - (iii) Discipline and social adjustment.
- (5) Teacher Education.
  - (a) Changing concept of teacher education—professional preparation of teachers for various levels—initial and in-service teacher education: objectives contents and methods. The role of professional organizations.
  - (b) Special problems.
    - (i) Absence of relationship between the training programmes and school work.
    - (ii) Social, economic and professional status of teachers.
- (6) Technical and Vocational education.
  - (a) Institutions for vocational and technical courses—vocation biased institutions and their importance for technical education enrollment, courses, workshop practice, staff and administration of technical institutions. Technical education in Germany and the U. S. S. R.
  - (b) Special problems.
    - (i) Technical education at different levels for meeting the manpower needs of India.
- (7) Social Education.
  - (a) Changing concept of adult education—adult literacy and social education—objectives of education of adults curriculum.
  - (b) Special problems.
    - (i) Organization of education for adults.
    - (ii) Production of literature for the non-literate.
    - (iii) Relapse into illiteracy.
- (8) Women Education.
  - Need—expansion and content.
- (9) General Problems:
  - (a) The language problem—the number of languages to be studied at different levels, the stage of introduction—objectives, scope and duration of each language. The medium of instruction at different levels—three language formula and difficulties in its implementation, place of English.
  - (a) Textbooks—qualities of good. Textbooks—policy of nationalization of textbooks.
  - (c) Education for national integration—need, education as an effective means in bringing about national solidarity.
  - (d) Education and the problem of national development.

Section B
Health Education

Objectives:

Knowledge and Understanding.

(1) Meaning and significance of Health Education.
(2) Various levels of Health Education programmes.
(3) Factors concerning health that hinder educational process.
(4) Meaning and process of safety education.
(5) Place and significance of sex education in educating the adolescent. Methods of imparting sex education.
(6) Various types of health services.
(7) Techniques of supervising Health Education.
(8) Need and scope of Physical Education.
(9) Various techniques and methods of Physical Education.

Abilities and Skills.

(1) Ability to analyze the factors concerning health that hinder educational process.
(2) Ability to sort out suitable types of health services in order to remove the effects of factors that hinder education process.
(3) Ability to supervise the functioning of the machinery established to maintain proper physical health.
(4) Ability to select and organize proper physical activities in schools.

Syllabus:

(1) Need of Health Education programmes—National level and school level.
(2) School Health Education programme—its objectives.

(a) Health Education: (a) Personal hygience.
(b) Educational implications of common diseases and ailments that hinder learning.
(c) Educational implication of defects in sensory organs.
(d) Deficiency in diet and its effects.

Safety Education: home, school, playfields and roads.
First aid in accidents and mishaps at school.

Sex Education : Importance in a changed social set-up, perversion and its effects.
Agencies and methods to impart sex education.

(b) Health Service : Medical examination and followup school clinic and provision for immunization against common ailments. School tiffin or meals.

(c) Health Supervision: Inspection of students and the school.
Plant with special attention to toilet and drinking water facilities.
Seating arrangement and postural defects.
Fatigue (physical and mental), its effects and ways to eliminate it.

(3) Physical Education	: Need and scope. Various types of physical activities which promote education. Principles of organizing physical activities in schools.

[Although the editor is aware that this is not in proper bibliography form, it is reported as taken from the Indian reference.]

Bibliography

1. J. S. Bedi: Current problems of Indian Education.
2. V. S. Mathur: Some issues in Indian Education.
3. S. N. Mukerji: Education in India—Today and Tomorrow.
4. Bhagwan Dayal: Development of modern Indian Education.
5. Humayun Kabir: Education in new India.
6. Singh and Singh: Current problems of Indian Education.
7. K. G. Saiyidain: Problems of educational reconstruction.
8. O. M. Desai: Primary education in India.
9. G. Ramanathan: Educational planning and national integration.
10. Ram Gopal: Linguistic affairs of India.
11. Government of India: (a) The Report of the Secondary Education Commission.
    (b) University of Education Commission 1949.
    (c) The Report of the Education Commission 1966.
12. Johri and Pathak: Contemporary problems of Indian Education.
13. Dikshit-Joshi: Bhartiya Shiksha ki pramukh samasyayen.
14. Pathek-Tyagi: Bhartiya Shiksha Ke Ayog.
15. Mehta-Desai: Bhartiya Shiksha ki Vartman samasyayen.
16. Bhai Yogendrajit: Arvachin Bhartiya Shiksha ka Vikas tatha samasyayen.
17. J. P. Naik: The first year book of Education.
18. William & Brownell: Administration of Health and Physical Education.
19. Health Education: H. M. S. O. London.
20. Cyrie Bibby: Sex Education.
21. J. P. Sherry: Swastaya Siksha.
22. A. V. Mohan: Sharirik shiksha ke Sidhanta.
23. Dinesh Chand: Swasthya Vigyan.
24. Govila: Shikshalaya Swasthya Shiksha.

PAPER IV & V—PRINCIPLES AND METHODS OF TEACHING TWO SCHOOL SUBJECTS.

Knowledge and Understanding

(1) The aims and objectives of teaching a school subject.
(2) Principles of curriculum construction and contents of the curriculum in a school subject.
(3) The latest methods, techniques and devices of teaching a school subject.
(4) Unit planning and day-to-day planning of lessons.
(5) The place and functions of material aids in teaching-learning process.
(6) The place of textbooks, assignments and homework.
(7) Developmental teaching, teaching for transfer, assimilation and permanence.

(8) The ways and means of developing self-study habits.
(9) The importance of diagnostic and remedial programmes.
(10) The relationship of objectives, contents, methods of teaching and procedures of evaluation.
(11) The various procedures and devices of evaluating the learning outcomes in a school subject.
(12) The relationship of the subject with other subjects in the curriculum and real life.

(b) Abilities and Skills.

(1) Ability to formulate objectives of a unit in the light of the aims of teaching the subject and the level of pupil's achievement.
(2) Ability to organize and arrange the subject-matter corresponding to the objective.
(3) Skill in selecting and/or evolving method appropriate to the objective and the subject-matter.
(4) Ability to construct unit plans and details of daily lessons.
(5) Ability to select, prepare and use material aids functionally
(6) Ability to create motivational situation and its full explanation.
(7) Ability to organize and guide curricular and co-curricular activities and participate in them.
(8) Ability to guide pupils' growth according to their individual capacities.
(9) Ability to assess the suitability of syllabi and textbooks.
(10) Ability to correct assignments and home-work and to assess their effectiveness.

Methods of Teaching Geography

1. Modern concept of Geography—Human Geography and its importance.
2. Aims and objectives of teaching Geography. Geography and international understanding.
3. Place of Geography in the school curriculum, syllabus for primary and secondary schools and principles of their construction.
4. Methods of teaching Geography in (a) the Primary (b) Middle and (c) High School classes—Story telling, regional, inductive and deductive methods.
5. Study of home region and local Geography and its place of higher secondary stage and importance of excursion.
6. Geography room:—equipment, apparatus and appliances, Geography library, museum.
7. Teaching aids of various kinds—maps, models, pictures, audio-visual aids, atlases, & wall maps.
8. Practical Geography in and outside the class room, nature and content of a work in different classes.
9. Correlation of Geography with other school subjects.
10. Geography textbooks, their qualities at different stages of education.
11. Evaluation of achievements in Civics.

Books recommended:

1. Wallis: The Teaching of Geography.
2. Fair Grieve: Geography in School.
3. Barnard: Principles and Practice of Geography Teaching.

4. H. N. Singh: Bhugol Shiksha.
5. UNESCO: Teaching of Geography for International Understanding.

Methods of Teaching Mathematics.

Unit—1. Objectives of Mathematics Education, the nature of Mathematics, types of objectives covering information of facts, concepts and understanding of principles, problem solving skills; attitudes and interests. Historical development of Mathematics.

Unit—2. Curriculum of Mathematics—Place and function in secondary education, planning of syllabus, critical appraisal of the prescribed syllabus.

Unit—3. Methods of teaching.
- (i) Analytic and synthetic methods.
- (ii) Heuristic and laboratory methods.
- (iii) Problem and project methods.
- (iv) Inductive and deductive methods.

Unit—4. The teaching of Arithmetic—Aims and scope.
- (a) Teaching of counting, number and concepts.
- (b) Teaching of fractions, decimals, percentages, etc.
- (c) Teaching of four fundamental rules.

The teaching of Algebra—Aims and scope.
- (a) Teaching of directed numbers.
- (b) Teaching of formulae and factors.
- (c) Teaching of graphs.
- (d) Teaching of equations.
- (e) Teaching of problems.

The teaching of Geometry—Aims and scope.
- (a) Teaching of definitions.
- (b) Teaching of theorems and constructions.
- (c) Teaching of Trigonometry and logarithms.

Unit—5. Means of effective instruction—Textbooks and their use. Aids to teaching; equipment for a Mathematics laboratory; mathematical excursions and club activities; practical, oral and written work, means of securing accuracy, correlation of Mathematics with other subjects.

Unit—6. Evaluation in Mathematics—Preparation of questions and test items in relation to objectives; diagnosis and supervision of instruction.

Unit—7. The Mathematics teacher—his professional preparation, qualifications, duties and responsibilities.

Books Recommended:

1. Butler C.H. & Wren C.H.	: Teaching of Secondary Mathematics.
2. Wilson	: Teaching of New Arithmetics.
3. Schultze Arthur.	: The Teaching of Mathematics in Secondary Schools.
4. Nunn, T.P.	: The Teaching of Algebra.
5. Young.	: Teaching of Arithmetics.

5. Master of Arts/Master of Science Teaching Schedules

The M.A. and M.S. Teaching Schedules that follow have been taken from the **Prospectus 1966 University College of Science (University of Calcutta).**

POST-GRADUATE COURSES OF STUDY

Anthropology

Topics	No. of theoretical lectures per week		No. of lectures required for completion of the topic	Hours of practical work per year	
	1st. Yr.	2nd. Yr.		1st. Yr.	2nd. Yr.
1	2	3	4	5	6
Physical Anthropology; Evolution; Comparative anatomy and antiquity of man etc.	3	2	150	—	—
Prehistoric archaeology and Material culture	3	4	155	—	—
Social Anthropology; and Field and Museum methods.	3	3	145	—	—
Comparative Anatomy; Human biology; Nutrition; Population studies	2	2	105	—	—
Economic and Psychological factors in the development of society; Social institutions; Acculturation	2	3	105	—	—
Advanced prehistoric archaeology; Methods of archaeological studies; Neolithic and metals etc.	4	4	110	—	—
Group A: Human Heredity; Eugenics; Biometry	1	2	60	—	120
Group B: Changes of tribal culture; maladjustment; statistical methods	1	2	70	—	Field Work
Group C: Geo-chronology; Prehistoric Ecology; Environmental Archaeology and Dating	—	3	70	—	80
Somatometry, Craniometry, Apes and fossil men and museum method	—	—	—	110	160
Prehistory, Technology, and Field work	—	—	—	150	160

Applied Mathematics

Topics	No. of theoretical lectures per week		No. of lectures required for completion of the topic	Hours of practical work per year	
	1st. Yr.	2nd. Yr.		1st. Yr.	2nd. Yr.
1	2	3	4	5	6
General Mechanics I	3	1	90	—	—
General Mechanics II	3	1	90	—	—
Elements of Fluid Mechanics	3	1	90	—	—
Analysis and Differential Equations	3	2	120	—	—
Methods of Applied Mathematics					
(a) Analytical Methods	—	2	60	—	—
(b) Numerical Methods	—	1	70	2	2
Spherical Astronomy	2	—	50	—	—
Elements of Electricity and Magnetism	2	—	50	—	—
Mathematical Theory of Elasticity & Plasticity	—	6	180	—	—
Fluid Mechanics	—	6	180	—	—
Geodesy and Geophysics	—	6	180	—	—
Quantum Mechanics	—	6	180	—	—
Seminar	3	—	—	—	—

Biochemistry

	1st. Yr.	2nd. Yr.		1st. Yr.	2nd. Yr.
1	2	3	4	5	6
Physical Chemistry	1	1	40	12	—
Organic Chemistry	2	2	76	26	—
Physiology	1	1	40	—	—
Plant Biochemistry	—	1	20	—	—
Nutrition	—	1	20	—	—
Dietetics	—	1	20	—	—
Enzyme Chemistry & Technology	2	2	70	—	14
Microbiology	2	3	90	—	30
Antibiotics	—	1	40	—	10
Immunology	—	2	20	—	2
Industrial Fermentation	1	2	40	—	10
Food Technology	1	1	20	—	19
Vitamins	1	1	10	—	—
Special Topics	1	2	86	—	17
Metabolism	2	3	112	—	15
Hormones	—	2	15	—	—

Botany

Topics	No. of theoretical lectures per week		No. of lectures required for completion of the topic	Hours of practical work per year	
	1st. Yr.	2nd. Yr.		1st. Yr.	2nd. Yr.
1	2	3	4	5	6
Algae	—	1	20	—	12
Bryophyta	—	1	15	—	20
Mycology & Plant Pathology	1	1	60	25	30
Pteridophyta	1	1	30	20	24
Paleobotany	—	1	20	—	25
Gymnosperms	—	1	30	—	20
Plant Physiology	2	1	60	60	—
Plant Introduction	1	—	10	—	—
Angiosperms	2	—	50	60	—
Cytogenetics	1	1	55	25	—
Microbiology; Viruses	1	—	20	—	—
Anatomy and Embryology	1	1	40	30	30
Geographical Botany	—	1	10	—	—
Crop Genetics	—	1	12	—	20
Special topics:					
Plant Physiology	—	1	30	—	30
Mycology & Plant Pathology	—	1	30	—	30
Cytology & Plant Breeding	—	1	30	—	30
Paleobotany	—	1	30	—	30
Economic Botany	—	1	30	—	30

Geography

	1st. Yr.	2nd. Yr.		1st. Yr.	2nd. Yr.
1	2	3	4	5	6
Geomorphology	1	2	61	—	—
Oceanography	—	1	30	—	—
Climatology	—	1	17	—	—
Plant Geography	1	1	40	—	—
Economic Geography	2	3	116	—	—
Human Geography	1	1	42	—	—
Regional Geography	5	3	126	—	—
Cartography	—	2	36	—	16
Pedology	—	1	25	—	25
Cultural Landscape	—	2	50	—	64
Political Geography	—	2	53	—	32
Surveying & Map Projection	1	1	57	48	155
Map Interpretation	—	—	—	—	20
Geological Maps	—	—	—	—	20
Land use	—	—	—	16	16

Geology

Topics	No. of theoretical lectures per week		No. of lectures required for completion of the topic	Hours of practical work per year	
	1st. Yr.	2nd. Yr.		1st. Yr.	2nd. Yr.
1	2	3	4	5	6
Economic Geology	4	6	300	120	120
Petrology and Mineralogy	6	4	300	240	120
General Geology and Structural Geology	2	1	—	120	—
Stratigraphy	2	2	200	—	—
Palaeontology	3	2	200	240	120
Special Papers:					
Coal	—	1	40	—	240
Cement and Cementing materials	—	1	40	—	240
Palaeobotany and Palaeontology	—	1	40	—	240
Field training classes				8 weeks	
Specialized topics like Geological prospecting, Surveying and Engineering Geology, etc.				8 weeks	

Physiology

	1st. Yr.	2nd. Yr.		1st. Yr.	2nd. Yr.
1	2	3	4	5	6
Blood Chemistry	—	1	10	—	—
Respiration	—	1	10	—	—
Work Physiology	—	1	14	—	—
Hormones	2	2	42	—	—
Vitamins, Nutrition and Dietetics	2	2	20	—	—
Special senses	—	1	18	—	—
Immunity, Immunochemistry, Chemistry & metabolism of lipids	2	2	30	—	—
Physiology of heart	3	2	26	—	—
Homeostatic control of circulation	1	1	8	—	—
Haemodynamic principles	1	1	6	—	—
Electrocardiography	1	1	6	—	—
Regional circulation	1	1	16	—	—
Cardiac energetics	1	1	2	—	—
Cerebral cortex	1	1	24	—	—
Neuron, etc.	1	—	26	—	—

Physiology (*continued*)

Topics	No. of theoretical lectures per week		No. of lectures required for completion of the topic	Hours of practical work per year	
	1st. Yr.	2nd. Yr.		1st. Yr.	2nd. Yr.
1	2	3	4	5	6
Kidney	1	1	18	—	—
Nerve-muscle physiology	1	1	24	—	—
High altitude physiology	1	1	12	—	—
Biochemistry including enzyme chemistry	1	5	40	—	—
Experimental Physiology	—	—	—	840	—
Histology	—	—	—	—	—
Nutrition and Dietetics (special)	—	2	30	—	576
Biophysics (special)	—	2	40	—	576
Biochemistry (special)	—	3	2[illegible]	—	576
Hormones (special)	—	2	24	—	576

Psychology
('A' Course)

	1st. Yr.	2nd. Yr.		1st. Yr.	2nd. Yr.
1	2	3	4	5	6
Compulsory Papers:					
General Psychology (including History of Psychology)	3	3	120	140	200
Genetics & Physiological Psychology	2	2	80	—	—
Child Psychology & Educational Psychology	2	2	96	—	—
Social Psychology & Abnormal Psychology	2	2	96	—	—
Optional Papers:					
Advanced Social Psychology	2	2	100	—	—
Advanced Abnormal Psychology	2	2	80	—	—
Indian Psychology	2	2	70	—	—
Experimental Aesthetics	2	2	70	—	—
Psychology of Industrial personnel & Industrial relations	2	—	96	—	—
Educational Psychology of the handicapped	2	—	96	—	—

Psychology
('B' Course)

Topics	No. of theoretical lectures per week		No. of lectures required for completion of the topic	Hours of practical work per year	
	1st. Yr.	2nd. Yr.		1st. Yr.	2nd. Yr.
1	2	3	4	5	6
Compulsory Papers:					
General Psychology (including History)	3	3	120	140	220
Applied Psychology	2	2	120	—	—
Psychometrics and Mental tests	2	3	120	—	—
Personality Adjustment	2	2	80	—	—
Optional Papers:					
Advanced Industrial	2	2	96	—	—
Criminology	2	2	80	—	—
Education of Abnormal Children	2	2	80	—	—
Social Psychiatry	2	2	—	—	—
Propaganda & Public Opinion	2	2	—	—	—

Pure Physics

	1st. Yr.	2nd. Yr.		1st. Yr.	2nd. Yr.
1	2	3	4	5	6
Theory of Vibration	2	—	40	—	—
Structure of Matter	2	—	50	—	—
Thermodynamics: Radiation; Statistical Mechanics	3	1	100	—	—
Field Theory of Electricity	2	—	40	—	—
Special relativity; Electronics (General)	1	1	25	—	—
Electronics (Special)	—	2	50	—	—
Quantum Theory	—	4	80	—	—
Nuclear Physics & Cosmic rays (Special)	—	8	150	—	—
X-rays	—	4	75	—	—
Advanced Optics	—	4	75	—	—
Biophysics	—	4	80	—	—
Solid State Physics	—	4	80	400	650

Pure Chemistry

General Topics:					
Physical Chemistry	5	—	130	200	—
Inorganic Chemistry	6	—	144	200	—
Organic Chemistry	7	—	168	200	—

Pure Chemistry (*continued*)

Topics	No. of theoretical lectures per week		No. of lectures required for completion of the topic	Hours of practical work per year	
	1st. Yr.	2nd. Yr.		1st. Yr.	2nd. Yr.
1	2	3	4	5	6
Special Topics:					
Physical Chemistry	—	9	198	—	250
Inorganic Chemistry	—	7	154	—	250
Organic Chemistry	—	8	176	—	250

Pure Mathematics

	1st. Yr.	2nd. Yr.		1st. Yr.	2nd. Yr.
1	2	3	4	5	6
Abstract Algebra	3	3	150	—	—
Metric, Affine and Projective Geometry	3	3	150	—	—
Differential Geometry and Differential Equations	4	3	150	—	—
Fundamentals of Analysis	5	3	150	—	—
Complex Functions, Infinite Series & product	5	3	150	—	—
Mechanics	3	3	150	—	—
Topology	—	6	180	—	—
Complex variable	—	6	180	—	—
Theory of Numbers	—	6	180	—	—
Non-Euclidian Geometry & Foundation of Geometry	—	6	180	—	—
Higher Algebra	—	6	180	—	—
Real Variables	—	6	180	—	—

Statistics

Probability	3	—	65	—	—
Math. Analysis	2	—	35	—	—
Algebra	2	—	50	—	—
Numerical Analysis	2	—	40	—	—
Descriptive Statistics	3	—	60	—	—
Sampling Distribution	—	2	55	—	—
Large Sample Theory	—	2	60	—	—
Theory of Inference (I & II)	—	2	60	—	—
Sample Survey	—	1	50	—	—
Genetics	—	1	20	—	—
Design & Analysis of Experiments	—	4	110	—	—

Statistics (*continued*)

Topics	No. of theoretical lectures per week		No. of lectures required for completion of the topic	Hours of practical work per year	
	1st. Yr.	2nd. Yr.		1st. Yr.	2nd. Yr.
1	2	3	4	5	6
Economic Statistics	1	1	40	—	—
Official Statistics*	2	—	15	—	—
Psychometry	—	2	50	—	—
Bioassay & Demography	—	2	50	—	—
Quality Control	—	1	40	—	—
Statistical Project**	3	—	15	—	—
Practical	9 hours	9 hours	—	90	250

* Classes on these topics are taken only for some months of the year.

** In the 1st year, practical classes are taken only from January. In the 2nd year, students undertake field work for two days a week up to December and one day a week from January.

Zoology

	1st. Yr.	2nd. Yr.		1st. Yr.	2nd. Yr.
1	2	3	4	5	6
History of Zoology, General principles of Biology, evidence and theories of evolution. Adaptation	2	2	128	—	—
Origin and distribution of animals in space and time	2	2	128	—	—
Cytology & Genetics	2	2	128	32	34
Embryology of Vertebrates	—	1	32	—	—
The structure, bionomics, affinities, development and classification of invertebrates except Annelida, Arthropoda and Mollusca	8	8	400	—	—
The structure, bionomics, affinities, development and classification of Annelida, Arthropoda & Mollusca	6	6	192	32	34
Histology & Histochemistry	2	2	64	32	34
The classification of Chordata: The structure, bionomics, affinities of Hemichordata, Urochordata, Cephalochordata and Cyclostomata	2	2	128	32	34

Zoology (*continued*)

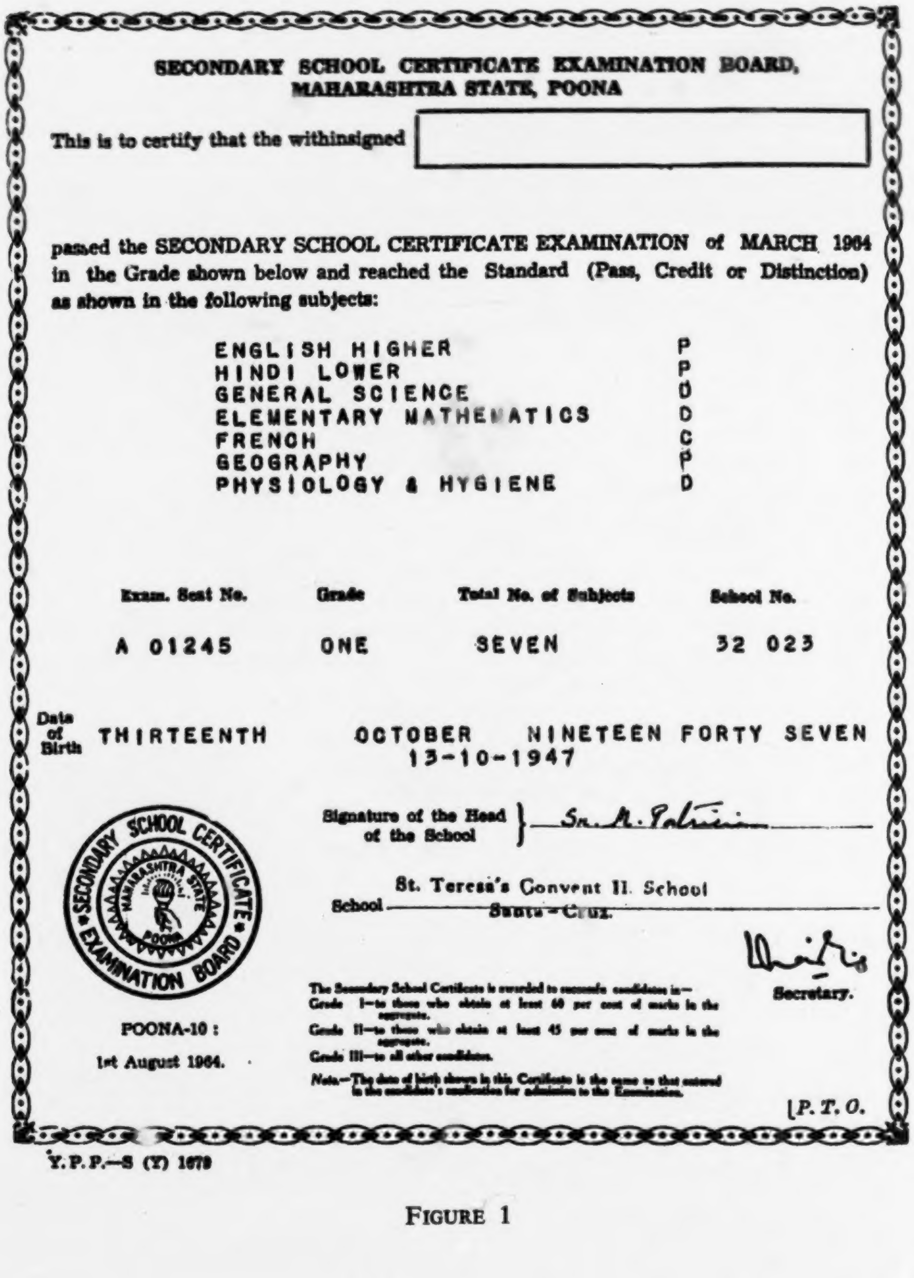
Topics	No. of theoretical lectures per week		No. of lectures required for completion of the topic	Hours of practical work per year	
	1st. Yr.	2nd. Yr.		1st. Yr.	2nd. Yr.
1	2	3	4	5	6
Biology and comparative anatomy of vertebrates	2	2	128	—	—
Special Topics: Fish & Fishery Entomology; Parasitology; Cell Biology } for each topic	2	2	64	32	34

APPENDIX K

Samples of Selected Indian Credentials

This appendix presents samples of selected Indian credentials especially for the newer admissions officer. While a variety of credentials from the secondary school level through the master's degree have been included, the immense variety of types and formats of Indian credentials at all educational levels renders any attempt to make such an appendix as this a comprehensive one in any sense of the word truly impossible. Therefore, admissions officers are urged to treat these samples only as somewhat representative of certain Indian credentials.

Fig. 1. Secondary School Certificate
Fig. 2. Secondary School Certificate Examination Marks Sheet
Fig. 3. High School Certificate/Marks Sheet
Fig. 4. Higher Secondary School Certificate/Marks Sheet
Fig. 5. Indian School Certificate (front)
Fig. 6. Indian School Certificate (back)
Fig. 7. Intermediate Examination Certificate
Fig. 8. Intermediate Examination Certificate/Marks Sheet
Fig. 9. Licentiate in Teaching
Fig. 10. Pre-University Examination Certificate/Marks Sheet
Fig. 11. First B.Sc. Examination Certificate/Marks Sheet
Fig. 12. Second B.Sc. Examination Certificate/Marks Sheet
Fig. 13. Third (or Final) B.Sc. Degree Examination Certificate/Marks Sheet
Fig. 14. B.Sc. Degree Examination (Three Year) Statement of Marks
Fig. 15. First Year B.Tech. Grade Card
Fig. 16. Bachelor of Science Degree Certificate
Fig. 17. Bachelor of Education Degree Certificate
Fig. 18. B.Ed. Degree Examination Marks Sheet
Fig. 19. Master of Science Degree Certificate
Fig. 20. M.A. (Previous) Examination Marks Sheet
Fig. 21. M.A. (Final) Examination Marks Sheet



SECONDARY SCHOOL CERTIFICATE EXAMINATION BOARD,
MAHARASHTRA STATE, POONA

This is to certify that the withinsigned

passed the SECONDARY SCHOOL CERTIFICATE EXAMINATION of MARCH 1964 in the Grade shown below and reached the Standard (Pass, Credit or Distinction) as shown in the following subjects:

ENGLISH HIGHER	P
HINDI LOWER	P
GENERAL SCIENCE	D
ELEMENTARY MATHEMATICS	D
FRENCH	C
GEOGRAPHY	P
PHYSIOLOGY & HYGIENE	D

Exam. Seat No.	Grade	Total No. of Subjects	School No.
A 01245	ONE	SEVEN	32 023

Date of Birth THIRTEENTH OCTOBER NINETEEN FORTY SEVEN
13-10-1947

Signature of the Head of the School } Sr. M. Patricia

School St. Teresa's Convent H. School
Santa-Cruz.

Secretary.

POONA-10 :
1st August 1964.

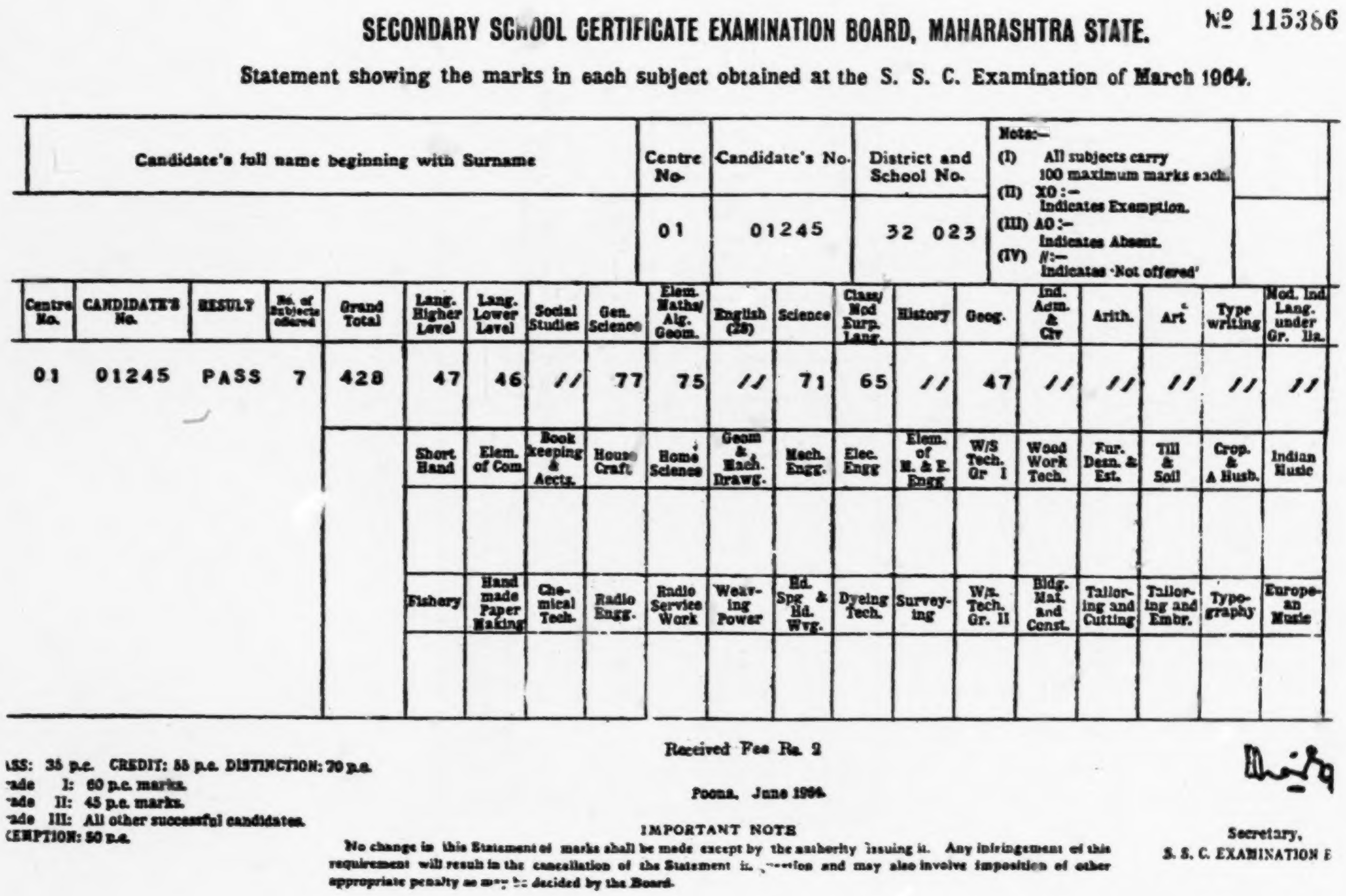
The Secondary School Certificate is awarded to successful candidates in—
Grade I—to those who obtain at least 60 per cent of marks in the aggregate.
Grade II—to those who obtain at least 45 per cent of marks in the aggregate.
Grade III—to all other candidates.

Note.—The date of birth shown in this Certificate is the same as that entered in the candidate's application for admission to the Examination.

[*P. T. O.*

Y.P.P.—S (Y) 1679

FIGURE 1



SECONDARY SCHOOL CERTIFICATE EXAMINATION BOARD, MAHARASHTRA STATE. № 115386

Statement showing the marks in each subject obtained at the S. S. C. Examination of March 1964.

Candidate's full name beginning with Surname	Centre No.	Candidate's No.	District and School No.	Note:— (I) All subjects carry 100 maximum marks each. (II) XO :— Indicates Exemption. (III) AO :— Indicates Absent. (IV) //:— Indicates 'Not offered'	
	01	01245	32 023		

Centre No.	CANDIDATE'S No.	RESULT	No. of Subjects offered	Grand Total	Lang. Higher Level	Lang. Lower Level	Social Studies	Gen. Science	Elem. Maths/ Alg. Geom.	English (28)	Science	Class/ Mod Eurp. Lang.	History	Geog.	Ind. Adm. & Civ	Arith.	Art	Type writing	Mod. Ind. Lang. under Gr. IIa.
01	01245	PASS	7	428	47	46	//	77	75	//	71	65	//	47	//	//	//	//	//
					Short Hand	Elem. of Com.	Book keeping & Accts.	House Craft.	Home Science	Geom & Mach. Drawg.	Mech. Engg.	Elec. Engg	Elem. of M. & E. Engg	W/S Tech. Gr I	Wood Work Tech.	Fur. Desn. & Est.	Till & Soil	Crop. & A Husb.	Indian Music
					Fishery	Hand made Paper Making	Chemical Tech.	Radio Engg.	Radio Service Work	Weaving Power	Hd. Spg & Hd. Wvg.	Dyeing Tech.	Surveying	W/s. Tech. Gr. II	Bldg. Mat. and Const.	Tailoring and Cutting	Tailoring and Embr.	Typography	European Music

ASS: 35 p.c. CREDIT: 55 p.c. DISTINCTION: 70 p.c.
ade I: 60 p.c. marks.
ade II: 45 p.c. marks.
ade III: All other successful candidates.
EMPTION: 50 p.c.

Received Fee Rs. 2

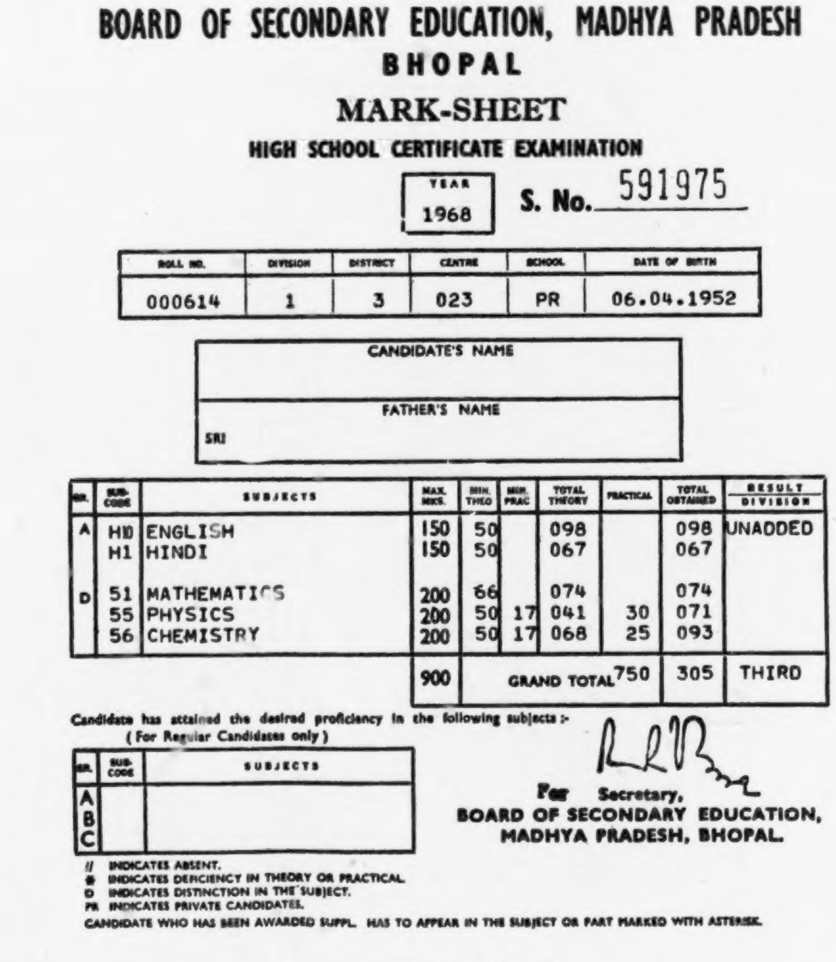
Poona, June 1964.

IMPORTANT NOTE

No change in this Statement of marks shall be made except by the authority issuing it. Any infringement of this requirement will result in the cancellation of the Statement in question and may also involve imposition of other appropriate penalty as may be decided by the Board.

Secretary,
S. S. C. EXAMINATION B

FIGURE 2



BOARD OF SECONDARY EDUCATION, MADHYA PRADESH
BHOPAL
MARK-SHEET
HIGH SCHOOL CERTIFICATE EXAMINATION

YEAR 1968 **S. No.** 591975

ROLL NO.	DIVISION	DISTRICT	CENTRE	SCHOOL	DATE OF BIRTH
000614	1	3	023	PR	06.04.1952

CANDIDATE'S NAME

FATHER'S NAME

SRI

SR.	SUB-CODE	SUBJECTS	MAX. MKS.	MIN. THEO	MIN. PRAC	TOTAL THEORY	PRACTICAL	TOTAL OBTAINED	RESULT DIVISION
A	H10	ENGLISH	150	50		098		098	UNADDED
	H1	HINDI	150	50		067		067	
D	51	MATHEMATICS	200	66		074		074	
	55	PHYSICS	200	50	17	041	30	071	
	56	CHEMISTRY	200	50	17	068	25	093	
			900	GRAND TOTAL		750		305	THIRD

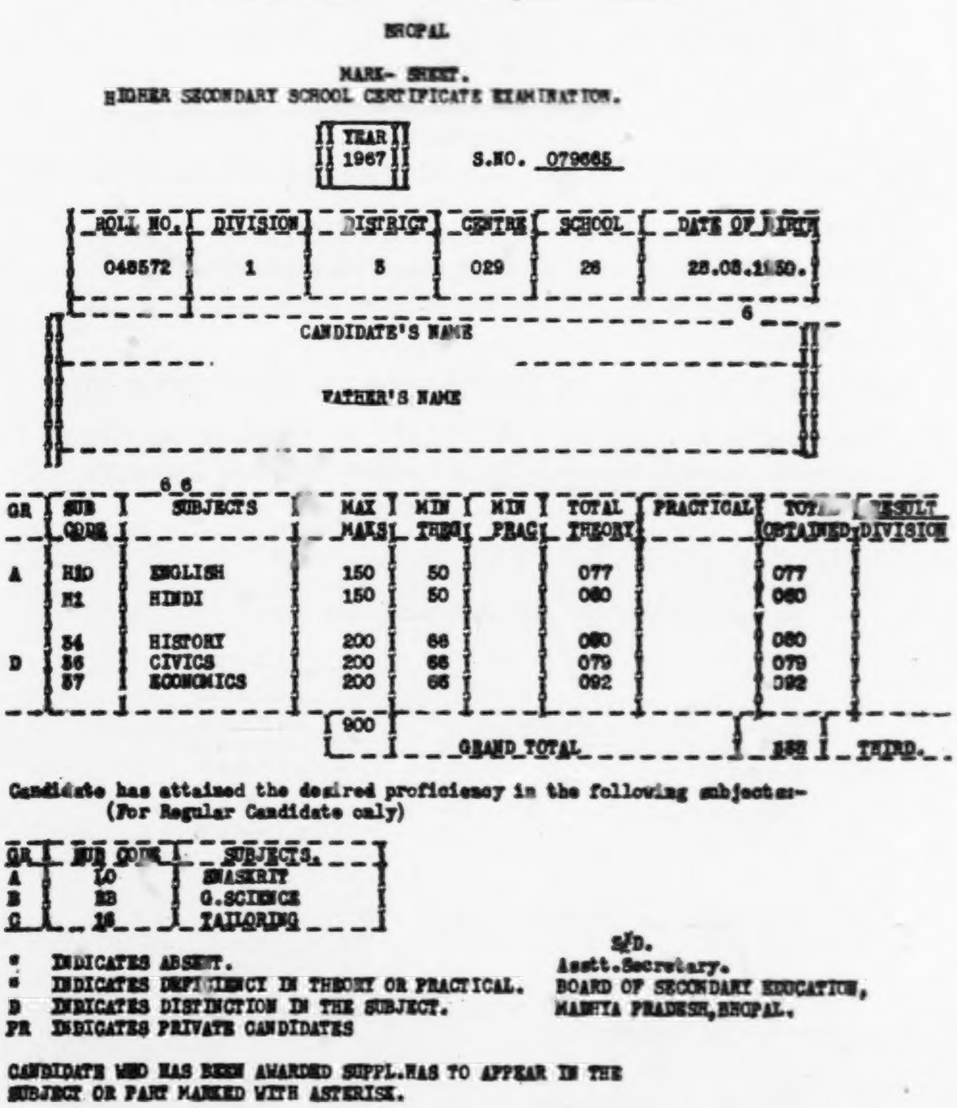
Candidate has attained the desired proficiency in the following subjects :-
(For Regular Candidates only)

SR.	SUB-CODE	SUBJECTS
A		
B		
C		

For Secretary,
BOARD OF SECONDARY EDUCATION,
MADHYA PRADESH, BHOPAL.

// INDICATES ABSENT.
* INDICATES DEFICIENCY IN THEORY OR PRACTICAL.
D INDICATES DISTINCTION IN THE SUBJECT.
PR INDICATES PRIVATE CANDIDATES.
CANDIDATE WHO HAS BEEN AWARDED SUPPL. HAS TO APPEAR IN THE SUBJECT OR PART MARKED WITH ASTERISK.

FIGURE 3



BOARD OF SECONDARY EDUCATION, MADHYA PRADESH

BHOPAL

MARK- SHEET.
HIGHER SECONDARY SCHOOL CERTIFICATE EXAMINATION.

YEAR 1967

S.NO. 079665

ROLL NO.	DIVISION	DISTRICT	CENTRE	SCHOOL	DATE OF BIRTH
048572	1	5	029	26	28.08.1950.

CANDIDATE'S NAME

FATHER'S NAME

GR	SUB CODE	SUBJECTS	MAX MAKS	MIN THEO	MIN PRAC	TOTAL THEORY	PRACTICAL	TOTAL OBTAINED	RESULT DIVISION
A	H10	ENGLISH	150	50		077		077	
	H1	HINDI	150	50		080		080	
	34	HISTORY	200	66		080		080	
D	36	CIVICS	200	66		079		079	
	37	ECONOMICS	200	66		092		092	
			900	GRAND TOTAL				388	THIRD.

Candidate has attained the desired proficiency in the following subjects:-
(For Regular Candidate only)

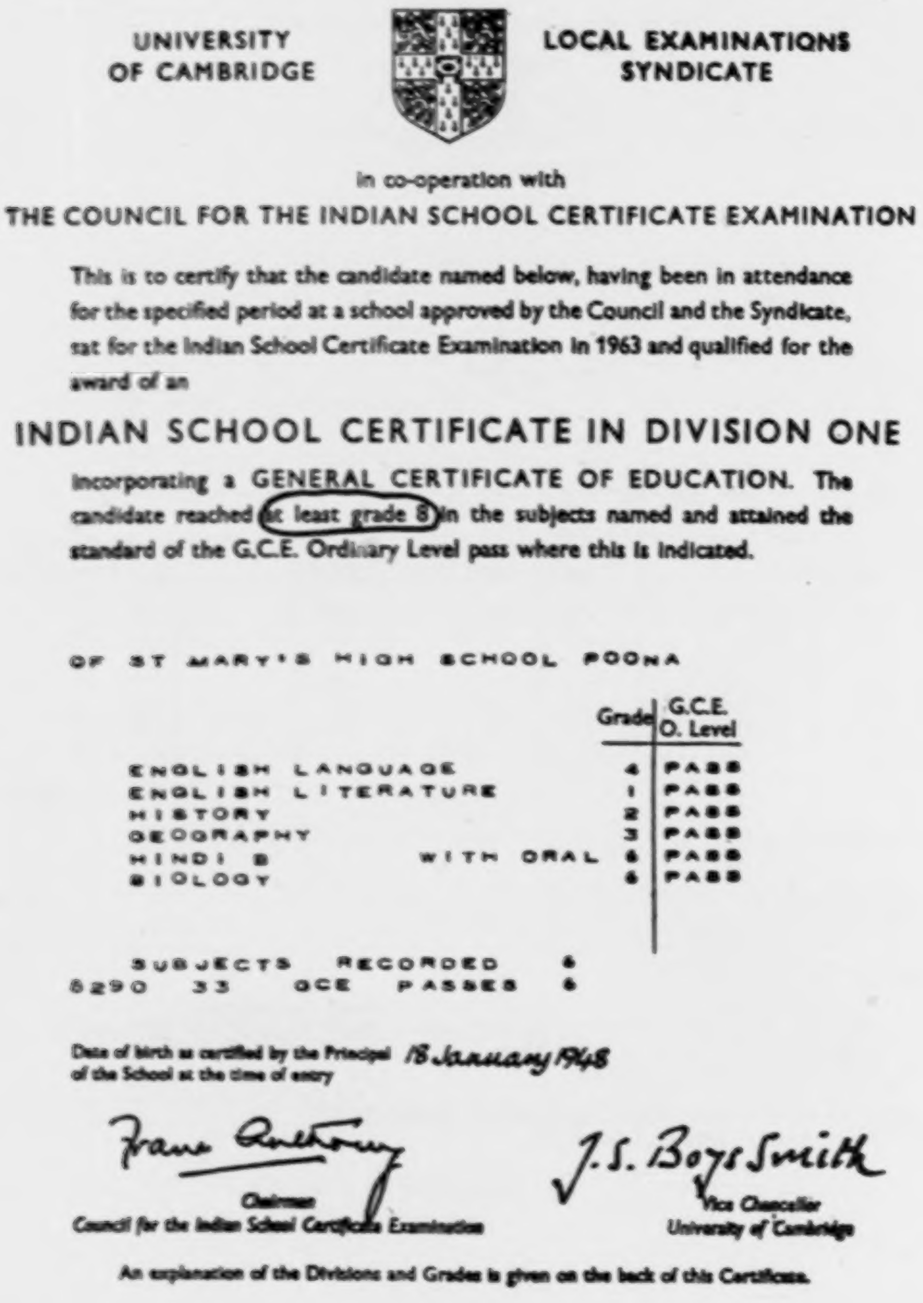
GR	SUB CODE	SUBJECTS.
A	10	SNASKRIT
B	33	G.SCIENCE
C	16	TAILORING

S/D.
Asstt. Secretary.
BOARD OF SECONDARY EDUCATION,
MADHYA PRADESH, BHOPAL.

- * INDICATES ABSENT.
- * INDICATES DEFICIENCY IN THEORY OR PRACTICAL.
- D INDICATES DISTINCTION IN THE SUBJECT.
- PR INDICATES PRIVATE CANDIDATES

CANDIDATE WHO HAS BEEN AWARDED SUPPL. HAS TO APPEAR IN THE SUBJECT OR PART MARKED WITH ASTERISK.

FIGURE 4



UNIVERSITY
OF CAMBRIDGE

LOCAL EXAMINATIONS
SYNDICATE

in co-operation with

THE COUNCIL FOR THE INDIAN SCHOOL CERTIFICATE EXAMINATION

This is to certify that the candidate named below, having been in attendance for the specified period at a school approved by the Council and the Syndicate, sat for the Indian School Certificate Examination in 1963 and qualified for the award of an

INDIAN SCHOOL CERTIFICATE IN DIVISION ONE

incorporating a GENERAL CERTIFICATE OF EDUCATION. The candidate reached at least grade 8 in the subjects named and attained the standard of the G.C.E. Ordinary Level pass where this is indicated.

OF ST MARY'S HIGH SCHOOL POONA

	Grade	G.C.E. O. Level
ENGLISH LANGUAGE	4	PASS
ENGLISH LITERATURE	1	PASS
HISTORY	2	PASS
GEOGRAPHY	3	PASS
HINDI B WITH ORAL	6	PASS
BIOLOGY	6	PASS

SUBJECTS RECORDED 6
6290 33 GCE PASSES 6

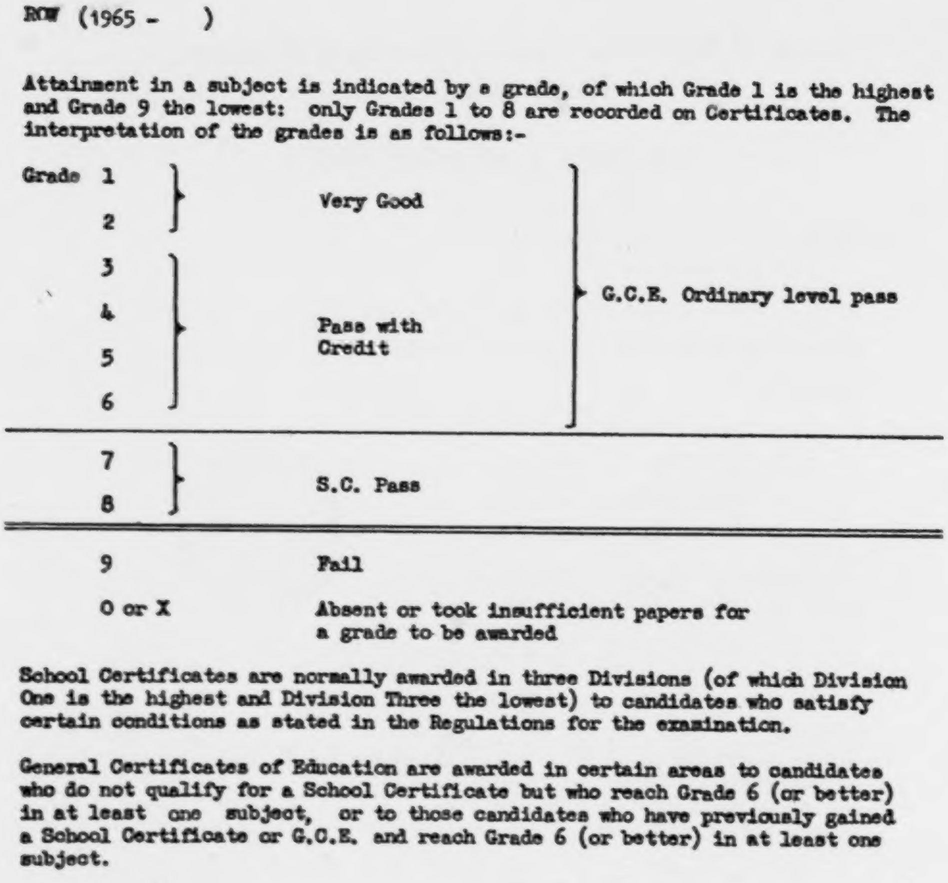
Date of birth as certified by the Principal of the School at the time of entry 18 January 1948

Frank Anthony
Chairman
Council for the Indian School Certificate Examination

J.S. Boys Smith
Vice Chancellor
University of Cambridge

An explanation of the Divisions and Grades is given on the back of this Certificate.

FIGURE 5



NOW (1965 -)

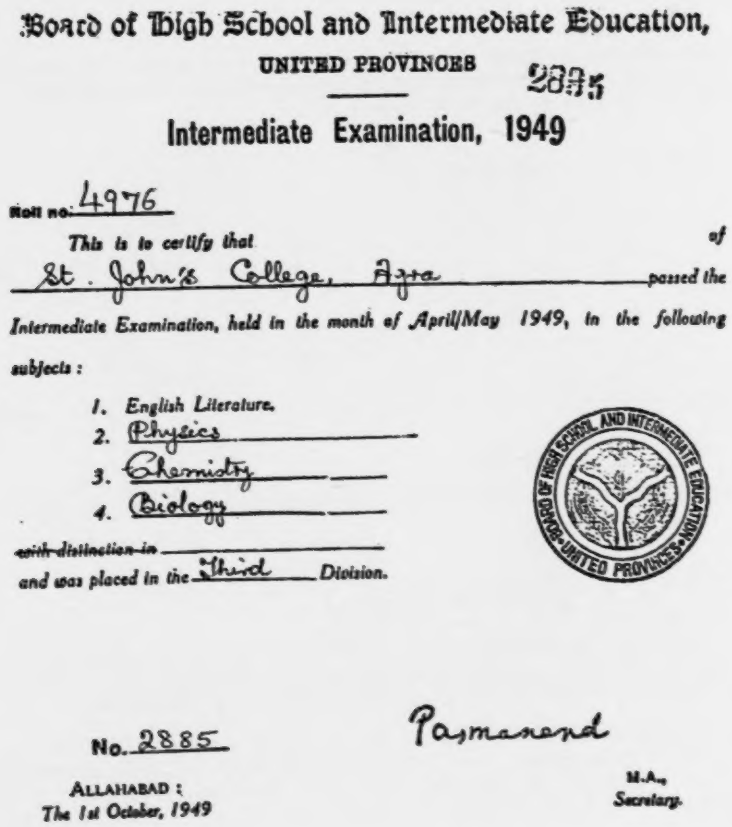
Attainment in a subject is indicated by a grade, of which Grade 1 is the highest and Grade 9 the lowest: only Grades 1 to 8 are recorded on Certificates. The interpretation of the grades is as follows:-

Grade 1 2	Very Good	G.C.E. Ordinary level pass
3 4 5 6	Pass with Credit	
7 8	S.C. Pass	
9	Fail	
0 or X	Absent or took insufficient papers for a grade to be awarded	

School Certificates are normally awarded in three Divisions (of which Division One is the highest and Division Three the lowest) to candidates who satisfy certain conditions as stated in the Regulations for the examination.

General Certificates of Education are awarded in certain areas to candidates who do not qualify for a School Certificate but who reach Grade 6 (or better) in at least one subject, or to those candidates who have previously gained a School Certificate or G.C.E. and reach Grade 6 (or better) in at least one subject.

FIGURE 6



Board of High School and Intermediate Education,

UNITED PROVINCES

2885

Intermediate Examination, 1949

Roll no. 4976

This is to certify that of

St. John's College, Agra passed the

Intermediate Examination, held in the month of April/May 1949, in the following subjects :

1. English Literature.
2. Physics
3. Chemistry
4. Biology

~~with distinction in~~

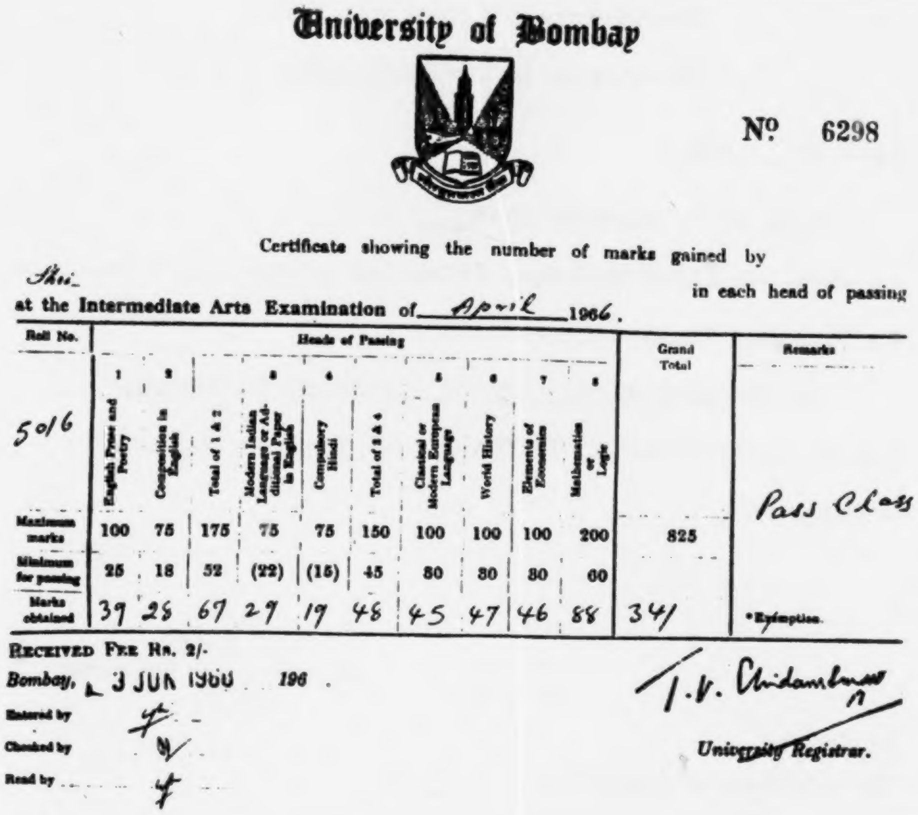
and was placed in the Third Division.

No. 2885

ALLAHABAD :
The 1st October, 1949

Parmanand
M.A.,
Secretary.

FIGURE 7



University of Bombay

Nº 6298

Certificate showing the number of marks gained by

Shri_ in each head of passing

at the **Intermediate Arts Examination** of April 1966.

Roll No.	Heads of Passing										Grand Total	Remarks
	1	2		3	4		5	6	7	8		
5016	English Prose and Poetry	Composition in English	Total of 1 & 2	Modern Indian Language or Additional Paper in English	Compulsory Hindi	Total of 3 & 4	Classical or Modern European Language	World History	Elements of Economics	Mathematics or Logic		
Maximum marks	100	75	175	75	75	150	100	100	100	200	825	Pass Class
Minimum for passing	25	18	52	(22)	(15)	45	80	80	80	60		
Marks obtained	39	28	67	29	19	48	45	47	46	88	341	*Exemption.

RECEIVED FEE Rs. 2/-

Bombay, 3 JUN 1966 196 .

Entered by

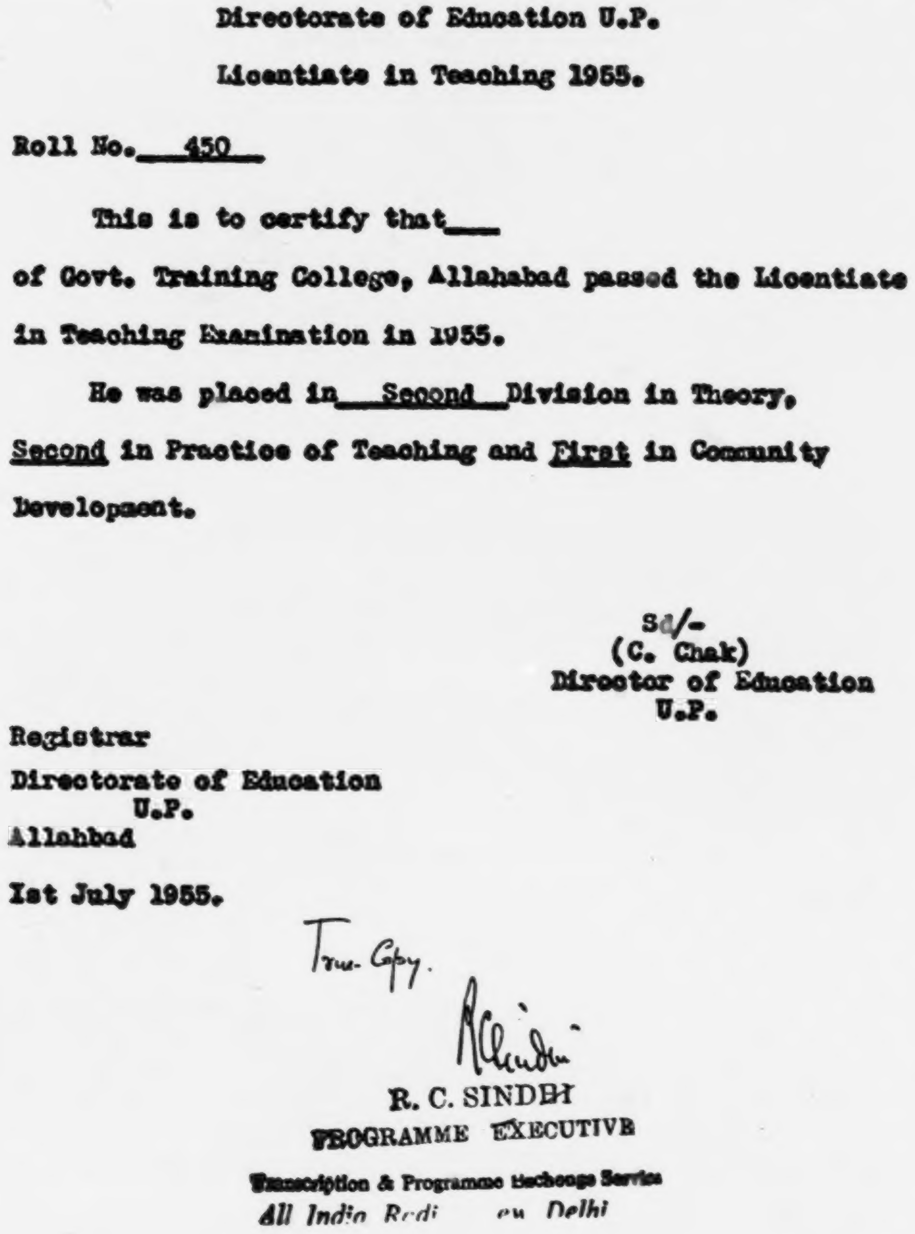
Checked by

Read by

T. V. Chidambaram

University Registrar.

FIGURE 8



Directorate of Education U.P.

Licentiate in Teaching 1955.

Roll No. 450

This is to certify that___
of Govt. Training College, Allahabad passed the Licentiate in Teaching Examination in 1955.

He was placed in Second Division in Theory, Second in Practice of Teaching and First in Community Development.

Sd/-
(C. Chak)
Director of Education
U.P.

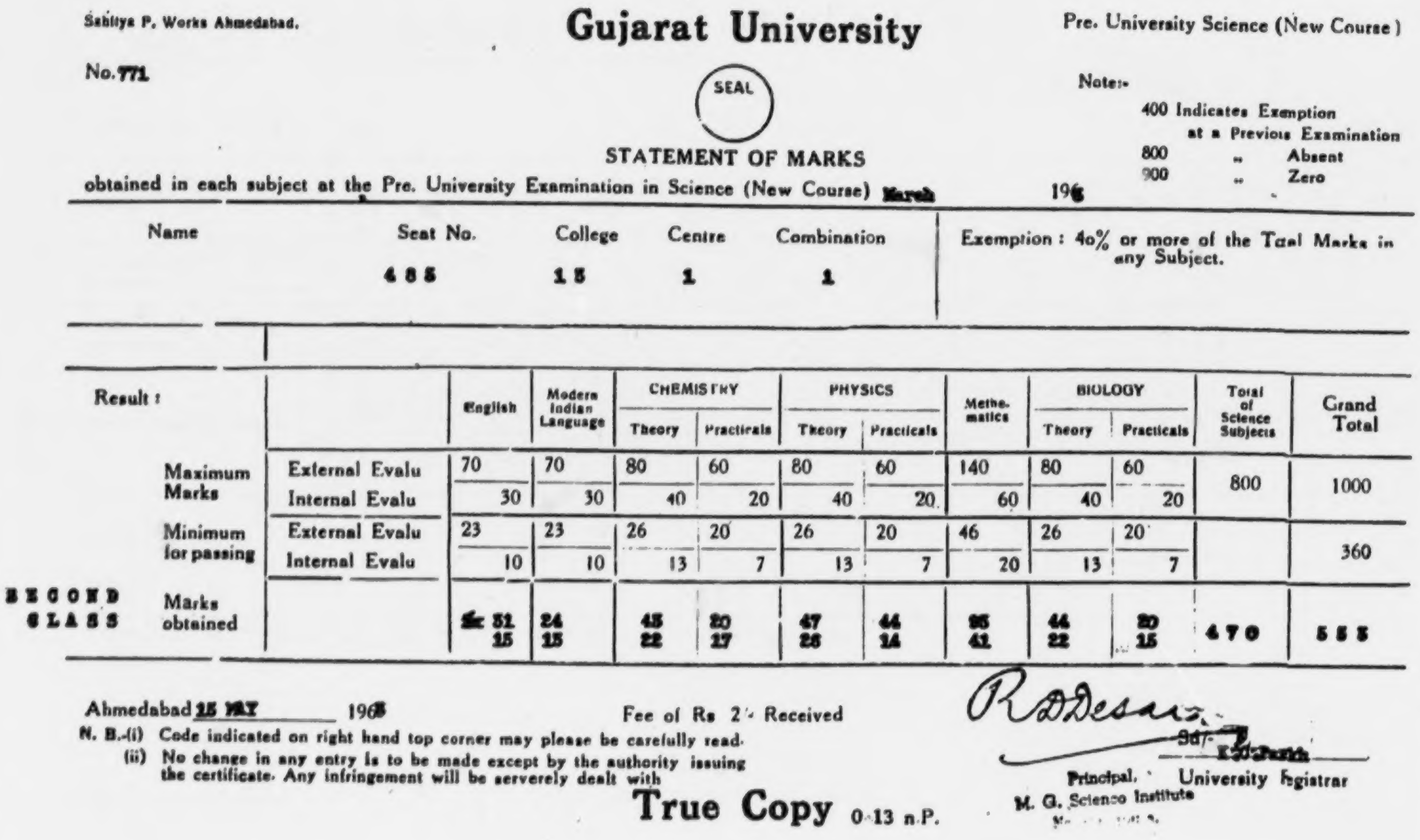
Registrar
Directorate of Education
U.P.
Allahbad

Ist July 1955.

True Copy.

R. C. SINDHI
PROGRAMME EXECUTIVE
Transcription & Programme Exchange Service
All India Radi[illegible]ew Delhi

FIGURE 9



Sahitya P. Works Ahmedabad.

Gujarat University

Pre. University Science (New Course)

No. 771

SEAL

Note:-
400 Indicates Exemption at a Previous Examination
800 " Absent
900 " Zero

STATEMENT OF MARKS

obtained in each subject at the Pre. University Examination in Science (New Course) March 196

Name	Seat No.	College	Centre	Combination	Exemption : 40% or more of the Taal Marks in any Subject.
	485	15	1	1	

Result :		English	Modern Indian Language	CHEMISTRY		PHYSICS		Mathematics	BIOLOGY		Total of Science Subjects	Grand Total
				Theory	Practicals	Theory	Practicals		Theory	Practicals		
Maximum Marks	External Evalu	70	70	80	60	80	60	140	80	60	800	1000
	Internal Evalu	30	30	40	20	40	20	60	40	20		
Minimum for passing	External Evalu	23	23	26	20	26	20	46	26	20		360
	Internal Evalu	10	10	13	7	13	7	20	13	7		
SECOND CLASS Marks obtained		31 15	24 15	43 22	20 17	47 26	44 14	95 41	44 22	20 15	470	555

Ahmedabad 15 MAY 1963

Fee of Rs 2/- Received

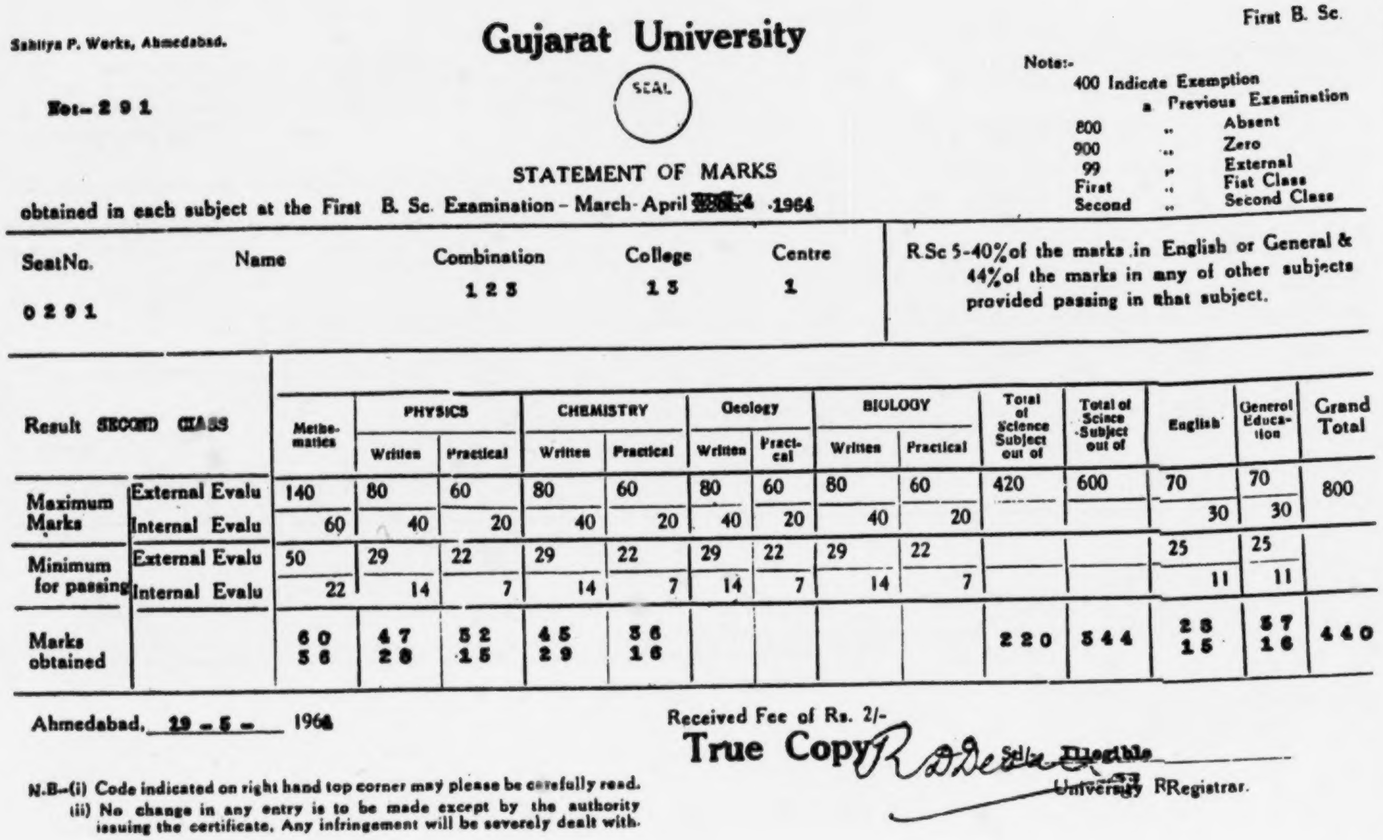
N. B.-(i) Code indicated on right hand top corner may please be carefully read.
(ii) No change in any entry is to be made except by the authority issuing the certificate. Any infringement will be serverely dealt with

True Copy 0-13 n.P.

R D Desai
Principal.
M. G. Science Institute

Sd/-
University Registrar

FIGURE 10



Sahitya P. Works, Ahmedabad.

Not-291

Gujarat University

SEAL

First B. Sc.

Note:-
400 Indicate Exemption
a Previous Examination
800 .. Absent
900 .. Zero
99 .. External
First .. Fist Class
Second .. Second Class

STATEMENT OF MARKS

obtained in each subject at the First B. Sc. Examination – March-April [illegible] 1964

SeatNo.	Name	Combination	College	Centre
0291		123	13	1

R.Sc 5-40% of the marks in English or General & 44% of the marks in any of other subjects provided passing in that subject.

Result SECOND CLASS		Mathematics	PHYSICS		CHEMISTRY		Geology		BIOLOGY		Total of Science Subject out of	Total of Scince Subject out of	English	Generol Education	Grand Total
			Written	Practical	Written	Practical	Written	Practical	Written	Practical					
Maximum Marks	External Evalu	140	80	60	80	60	80	60	80	60	420	600	70	70	800
	Internal Evalu	60	40	20	40	20	40	20	40	20			30	30	
Minimum for passing	External Evalu	50	29	22	29	22	29	22	29	22			25	25	
	Internal Evalu	22	14	7	14	7	14	7	14	7			11	11	
Marks obtained		60 36	47 28	32 15	45 29	36 16					220	344	28 15	37 16	440

Ahmedabad, 29-5- 1964

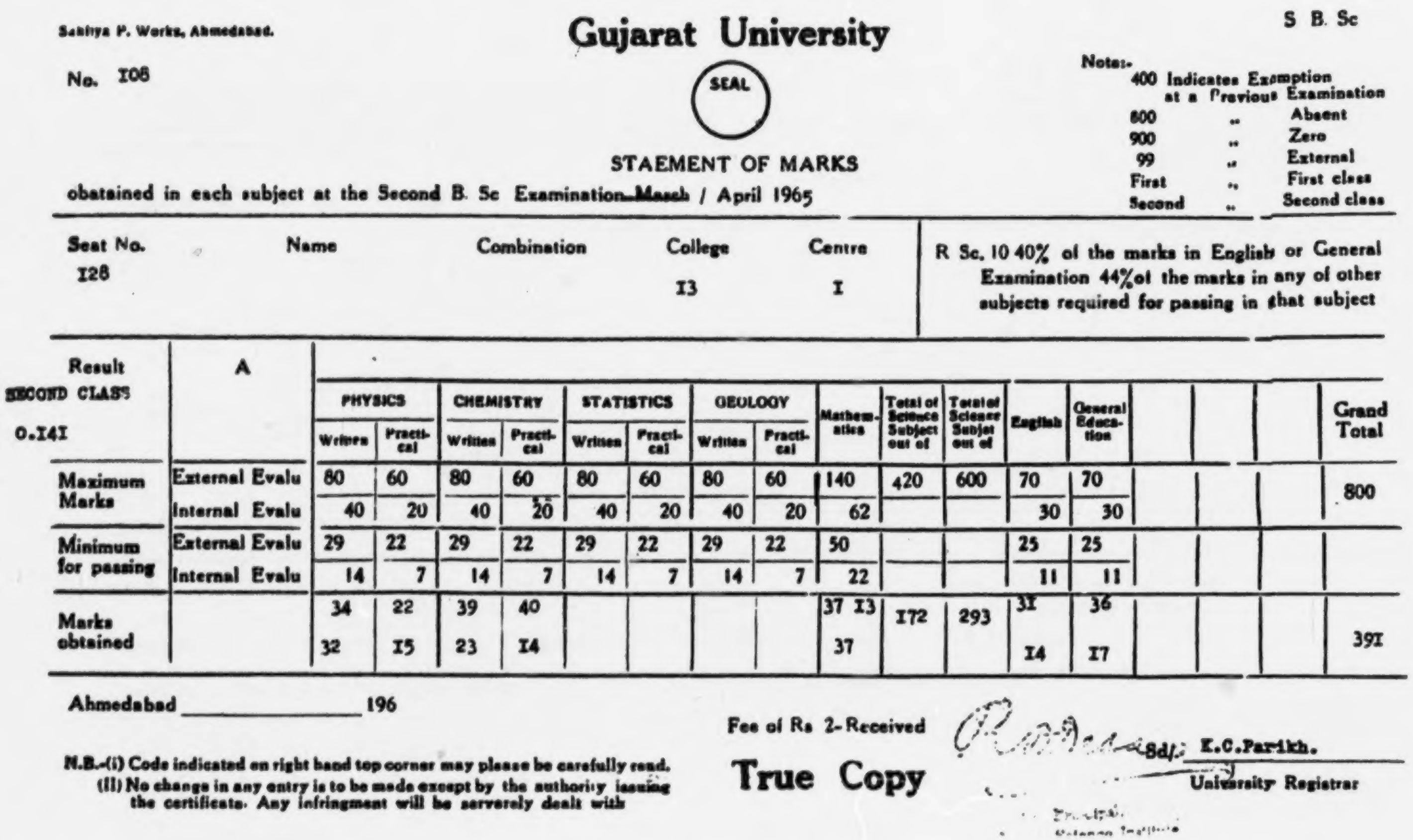
Received Fee of Rs. 2/-

True Copy

Sd/- Illegible
University RRegistrar.

N.B.-(i) Code indicated on right hand top corner may please be carefully read.
(ii) No change in any entry is to be made except by the authority issuing the certificate. Any infringement will be severely dealt with.

FIGURE 11



Sahitya P. Works, Ahmedabad.

S B. Sc

Gujarat University

No. I08

SEAL

Notes:-
400 Indicates Exemption at a Previous Examination
800 ,, Absent
900 ,, Zero
99 ,, External
First ,, First class
Second ,, Second class

STAEMENT OF MARKS

obatained in each subject at the Second B. Sc Examination ~~March~~ / April 1965

Seat No.	Name	Combination	College	Centre
I28			I3	I

R Sc. 10 40% of the marks in English or General Examination 44% of the marks in any of other subjects required for passing in that subject

Result SECOND CLASS O.I4I	A	PHYSICS		CHEMISTRY		STATISTICS		GEOLOGY		Mathematics	Total of Science Subject out of	Total of Science Subject out of	English	General Education				Grand Total
		Written	Practical	Written	Practical	Written	Practical	Written	Practical									
Maximum Marks	External Evalu	80	60	80	60	80	60	80	60	140	420	600	70	70				800
	Internal Evalu	40	20	40	20	40	20	40	20	62			30	30				
Minimum for passing	External Evalu	29	22	29	22	29	22	29	22	50			25	25				
	Internal Evalu	14	7	14	7	14	7	14	7	22			11	11				
Marks obtained		34	22	39	40					37 I3	I72	293	3I	36				
		32	I5	23	I4					37			I4	I7				39I

Ahmedabad ______________ 196

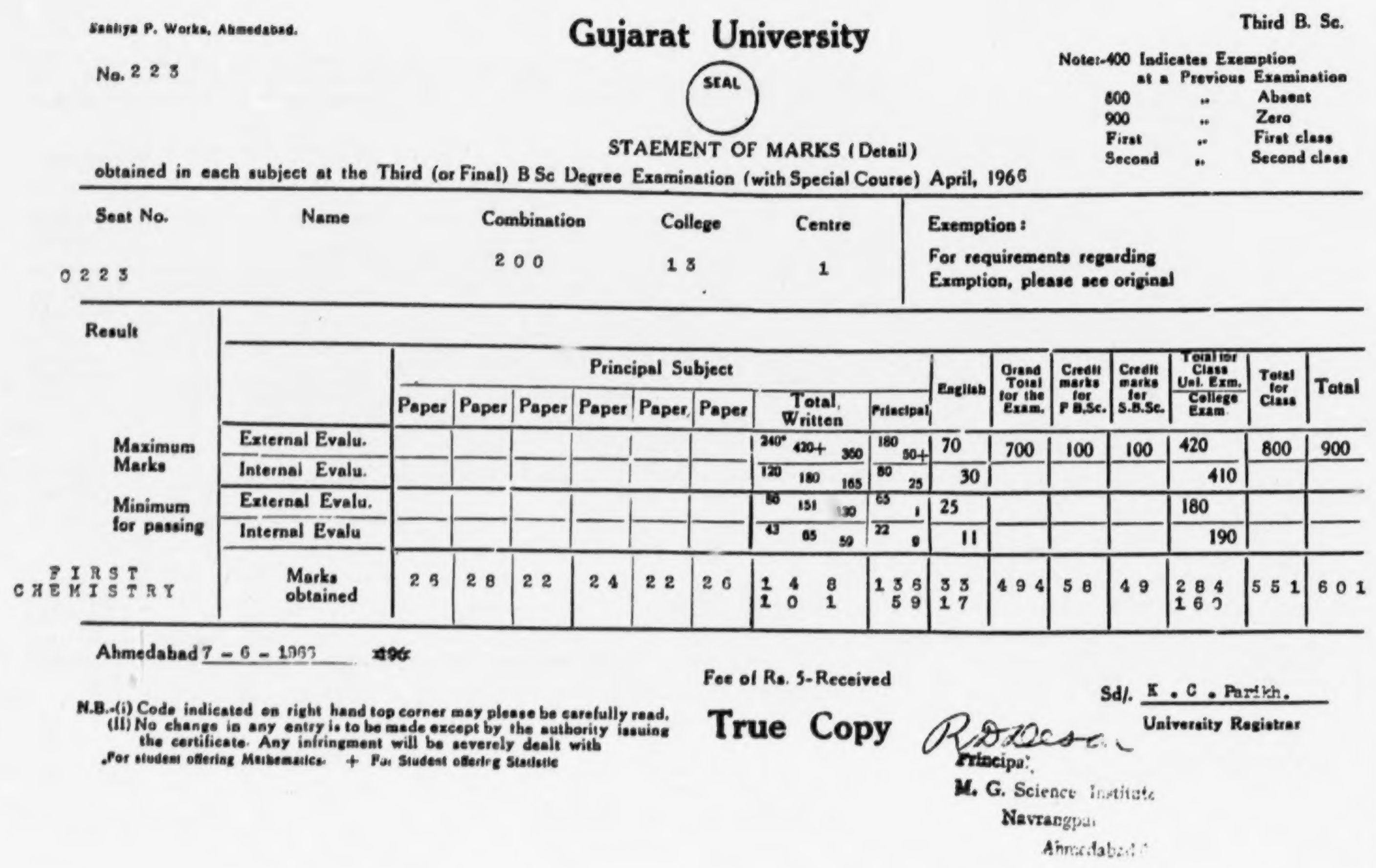
Fee of Rs 2-Received

True Copy

Sd/: K.C.Parikh.
University Registrar

N.B.-(i) Code indicated on right hand top corner may please be carefully read.
(ii) No change in any entry is to be made except by the authority issuing the certificate. Any infringment will be serverely dealt with

FIGURE 12



Sahitya P. Works, Ahmedabad.

No. 2 2 3

Gujarat University

SEAL

Third B. Sc.

Note:-400 Indicates Exemption at a Previous Examination
800 " Absent
900 " Zero
First " First class
Second " Second class

STAEMENT OF MARKS (Detail)

obtained in each subject at the Third (or Final) B Sc Degree Examination (with Special Course) April, 1966

Seat No.	Name	Combination	College	Centre
0 2 2 3		2 0 0	1 3	1

Exemption:
For requirements regarding Exmption, please see original

Result

		Principal Subject								English	Grand Total for the Exam.	Credit marks for F B.Sc.	Credit marks for S.B.Sc.	Total for Class Uni. Exm. / College Exam	Total for Class	Total
		Paper	Paper	Paper	Paper	Paper	Paper	Total, Written	Principal							
Maximum Marks	External Evalu.							240* 420+ 360	180 50+	70	700	100	100	420	800	900
	Internal Evalu.							120 180 165	80 25	30				410		
Minimum for passing	External Evalu.							96 151 130	65 1	25				180		
	Internal Evalu							43 65 59	22 9	11				190		
FIRST CHEMISTRY	Marks obtained	2 6	2 8	2 2	2 4	2 2	2 6	1 4 8 1 0 1	1 3 6 5 9	3 3 1 7	4 9 4	5 8	4 9	2 8 4 1 6 0	5 5 1	6 0 1

Ahmedabad 7 - 6 - 1963 ~~196~~

Fee of Rs. 5-Received

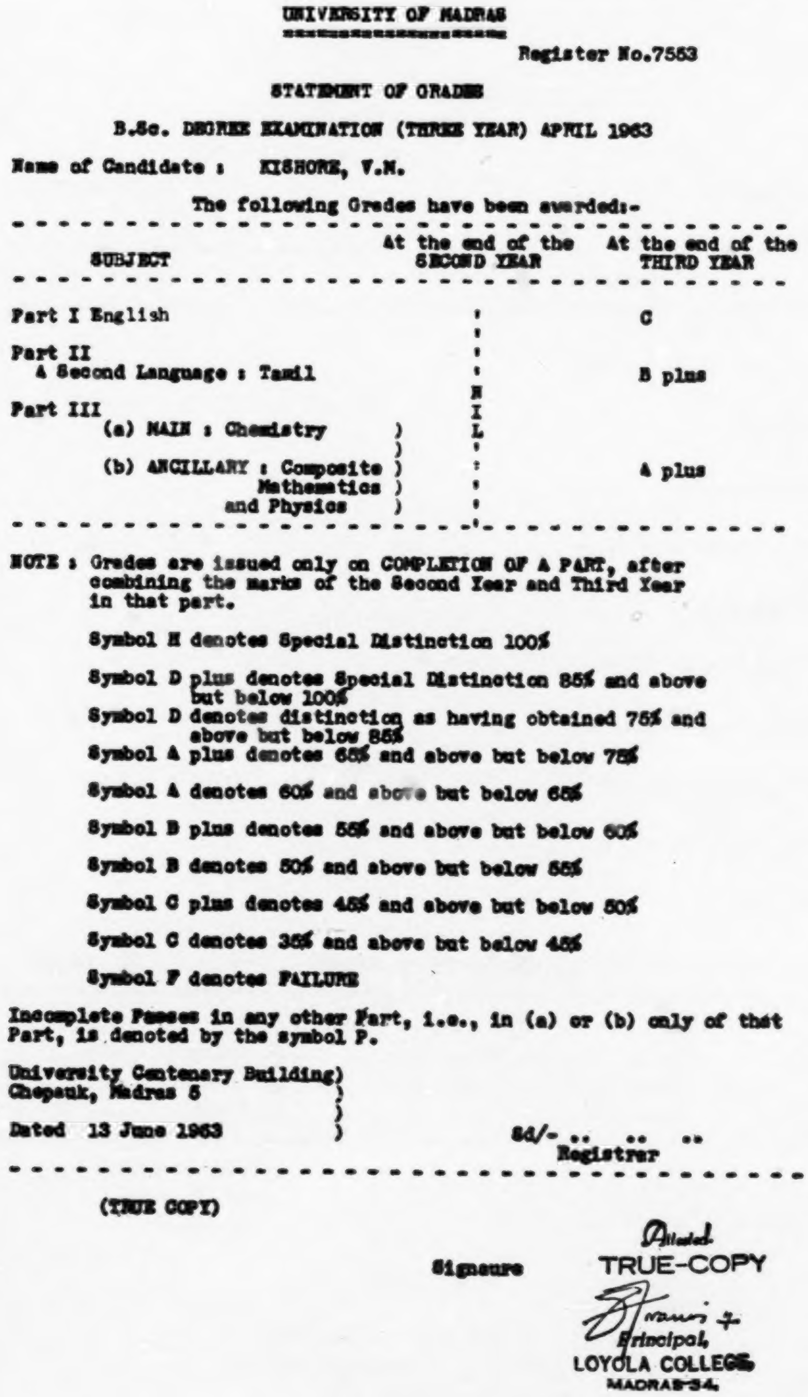
Sd/. K . C . Parikh.
University Registrar

N.B.-(i) Code indicated on right hand top corner may please be carefully read.
(ii) No change in any entry is to be made except by the authority issuing the certificate. Any infringment will be severely dealt with
*For student offering Mathematics. + For Student offering Statistic

True Copy

R D Desai
Principal,
M. G. Science Institute
Navrangpura
Ahmedabad

FIGURE 13



UNIVERSITY OF MADRAS

Register No.7553

STATEMENT OF GRADES

B.Sc. DEGREE EXAMINATION (THREE YEAR) APRIL 1963

Name of Candidate : KISHORE, V.N.

The following Grades have been awarded:-

SUBJECT	At the end of the SECOND YEAR	At the end of the THIRD YEAR
Part I English	NIL	C
Part II A Second Language : Tamil		B plus
Part III (a) MAIN : Chemistry (b) ANCILLARY : Composite Mathematics and Physics		A plus

NOTE : Grades are issued only on COMPLETION OF A PART, after combining the marks of the Second Year and Third Year in that part.

Symbol H denotes Special Distinction 100%

Symbol D plus denotes Special Distinction 85% and above but below 100%

Symbol D denotes distinction as having obtained 75% and above but below 85%

Symbol A plus denotes 65% and above but below 75%

Symbol A denotes 60% and above but below 65%

Symbol B plus denotes 55% and above but below 60%

Symbol B denotes 50% and above but below 55%

Symbol C plus denotes 45% and above but below 50%

Symbol C denotes 35% and above but below 45%

Symbol F denotes FAILURE

Incomplete Passes in any other Part, i.e., in (a) or (b) only of that Part, is denoted by the symbol P.

University Centenary Building)
Chepauk, Madras 5)
)
Dated 13 June 1963)

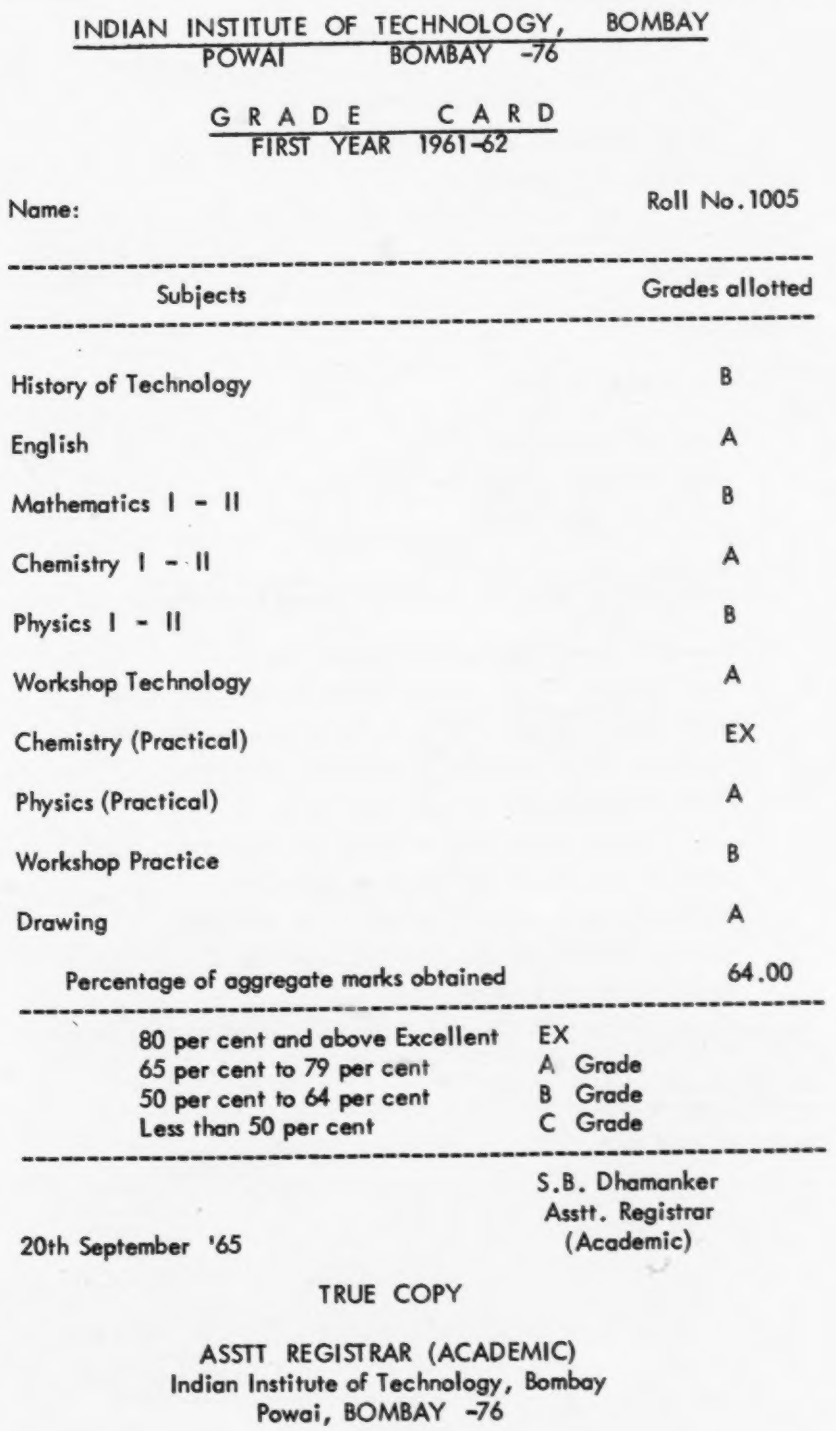
Sd/- .. .. ..
Registrar

(TRUE COPY)

Signeure

Attested
TRUE-COPY
Principal,
LOYOLA COLLEGE
MADRAS-34.

FIGURE 14



INDIAN INSTITUTE OF TECHNOLOGY, BOMBAY
POWAI BOMBAY -76

GRADE CARD
FIRST YEAR 1961-62

Name:

Roll No.1005

Subjects	Grades allotted
History of Technology	B
English	A
Mathematics I - II	B
Chemistry I - II	A
Physics I - II	B
Workshop Technology	A
Chemistry (Practical)	EX
Physics (Practical)	A
Workshop Practice	B
Drawing	A
Percentage of aggregate marks obtained	64.00

80 per cent and above Excellent	EX
65 per cent to 79 per cent	A Grade
50 per cent to 64 per cent	B Grade
Less than 50 per cent	C Grade

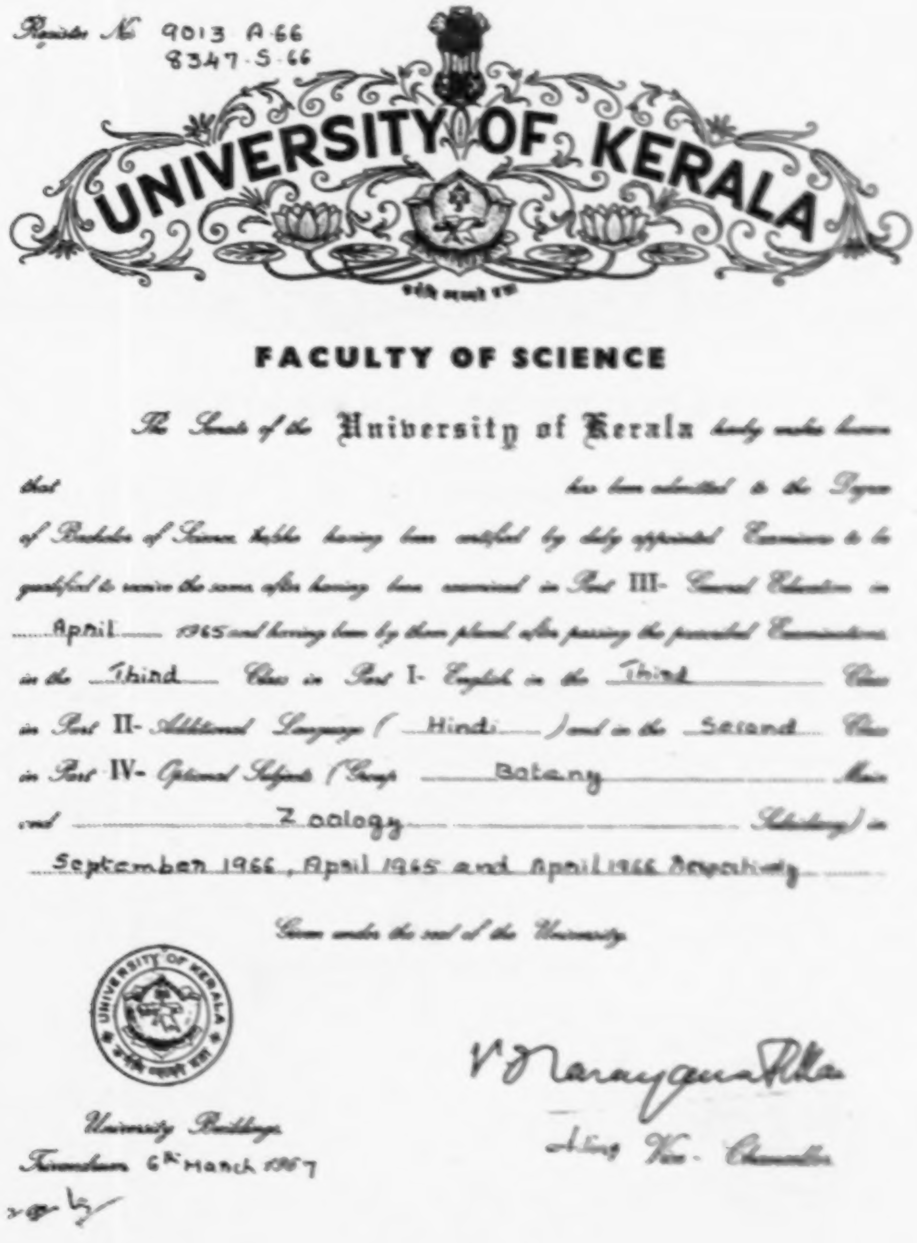
S.B. Dhamanker
Asstt. Registrar
(Academic)

20th September '65

TRUE COPY

ASSTT REGISTRAR (ACADEMIC)
Indian Institute of Technology, Bombay
Powai, BOMBAY -76

FIGURE 15



Register No. 9013 A-66
8347 S-66

UNIVERSITY OF KERALA

FACULTY OF SCIENCE

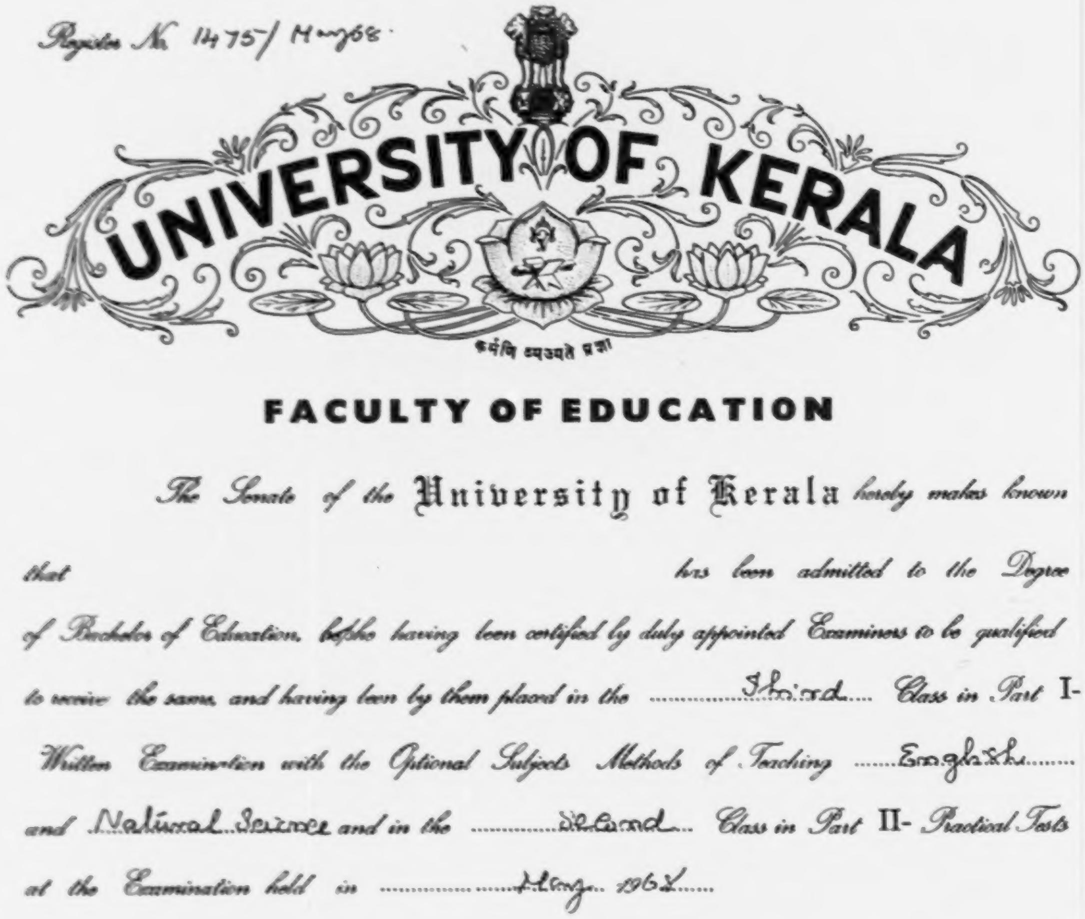
The Senate of the **University of Kerala** *hereby make known that has been admitted to the Degree of Bachelor of Science he/she having been certified by duly appointed Examiners to be qualified to receive the same after having been examined in Part* III- *General Education in* April *1965 and having been by them placed after passing the prescribed Examinations in the* Third *Class in Part* I- *English in the* Third *Class in Part* II- *Additional Language (* Hindi *) and in the* Second *Class in Part* IV- *Optional Subjects (Group* Botany *Main and* Zoology *Subsidiary) in* September 1966, April 1965 and April 1966 Respectively

Given under the seal of the University

University Buildings
Trivandrum 6th March 1967

V Narayana Pillai
Acting Vice-Chancellor

FIGURE 16



Register No. 1475/ May 68

UNIVERSITY OF KERALA

कर्मणि व्यज्यते प्रज्ञा

FACULTY OF EDUCATION

The Senate of the University of Kerala *hereby makes known that* *has been admitted to the Degree of Bachelor of Education, he/she having been certified by duly appointed Examiners to be qualified to receive the same, and having been by them placed in the* ....Third.... *Class in Part* I- *Written Examination with the Optional Subjects Methods of Teaching* ......English....... *and* Natural Science *and in the* ....Second... *Class in Part* II- *Practical Tests at the Examination held in* ....May 1968.....

Given under the seal of the University.

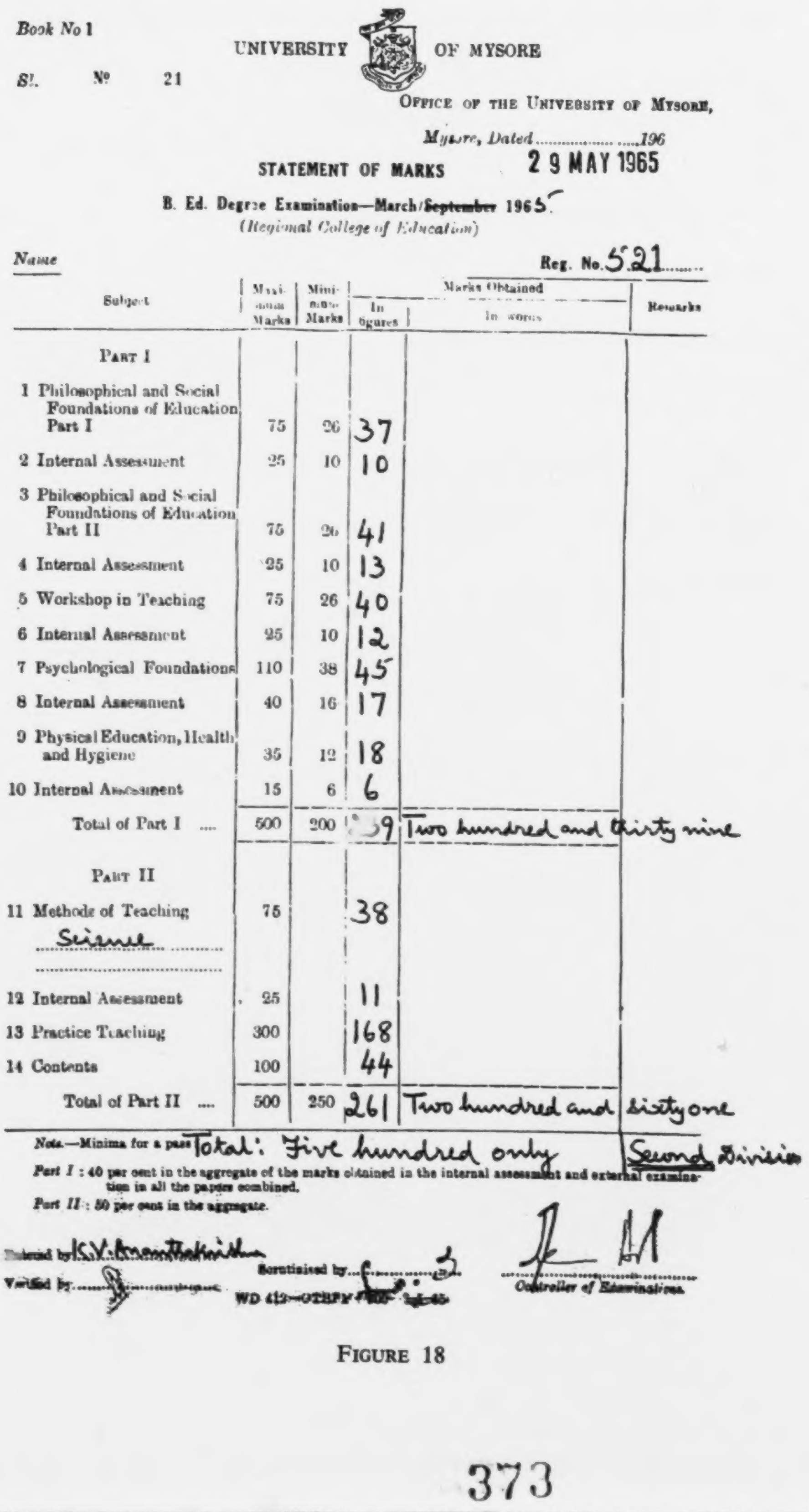
University Buildings

Trivandrum 20th march 1969

Samuel Mathai

Vice-Chancellor.

FIGURE 17



Book No 1

UNIVERSITY OF MYSORE

Sl. № 21

OFFICE OF THE UNIVERSITY OF MYSORE,

Mysore, Dated.........................196

29 MAY 1965

STATEMENT OF MARKS

B. Ed. Degree Examination—March/~~September~~ 1965
(Regional College of Education)

Name

Reg. No. 521

Subject	Maximum Marks	Minimum Marks	Marks Obtained In figures	Marks Obtained In words	Remarks
PART I					
1 Philosophical and Social Foundations of Education Part I	75	26	37		
2 Internal Assessment	25	10	10		
3 Philosophical and Social Foundations of Education Part II	75	26	41		
4 Internal Assessment	25	10	13		
5 Workshop in Teaching	75	26	40		
6 Internal Assessment	25	10	12		
7 Psychological Foundations	110	38	45		
8 Internal Assessment	40	16	17		
9 Physical Education, Health and Hygiene	35	12	18		
10 Internal Assessment	15	6	6		
Total of Part I	500	200	239	Two hundred and thirty nine	
PART II					
11 Methods of Teaching Science	75		38		
12 Internal Assessment	25		11		
13 Practice Teaching	300		168		
14 Contents	100		44		
Total of Part II	500	250	261	Two hundred and	sixty one

Note.—Minima for a pass Total: Five hundred only   Second Division

Part I : 40 per cent in the aggregate of the marks obtained in the internal assessment and external examination in all the papers combined.

Part II : 50 per cent in the aggregate.

Entered by K.V.

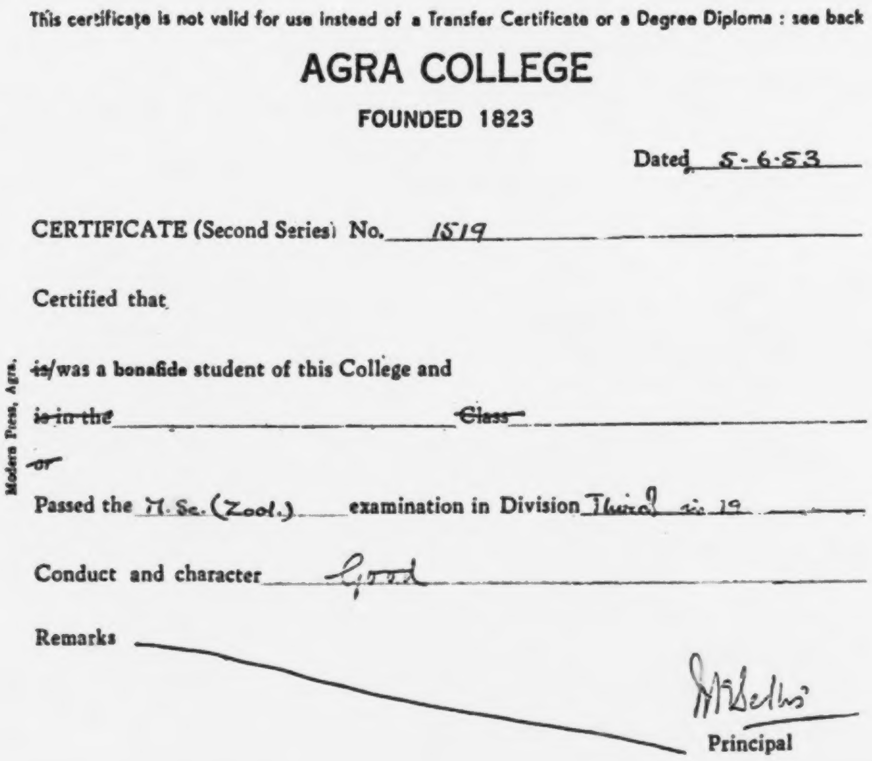
Verified by

Scrutinised by

WD 412—GTBPY—[illegible]

Controller of Examinations.

FIGURE 18



This certificate is not valid for use instead of a Transfer Certificate or a Degree Diploma : see back

AGRA COLLEGE

FOUNDED 1823

Dated 5-6-53

CERTIFICATE (Second Series) No. 1519

Certified that

~~is~~/was a bonafide student of this College and

~~is in the~~ ~~Class~~

~~or~~

Passed the M. Sc. (Zool.) examination in Division Third in 19

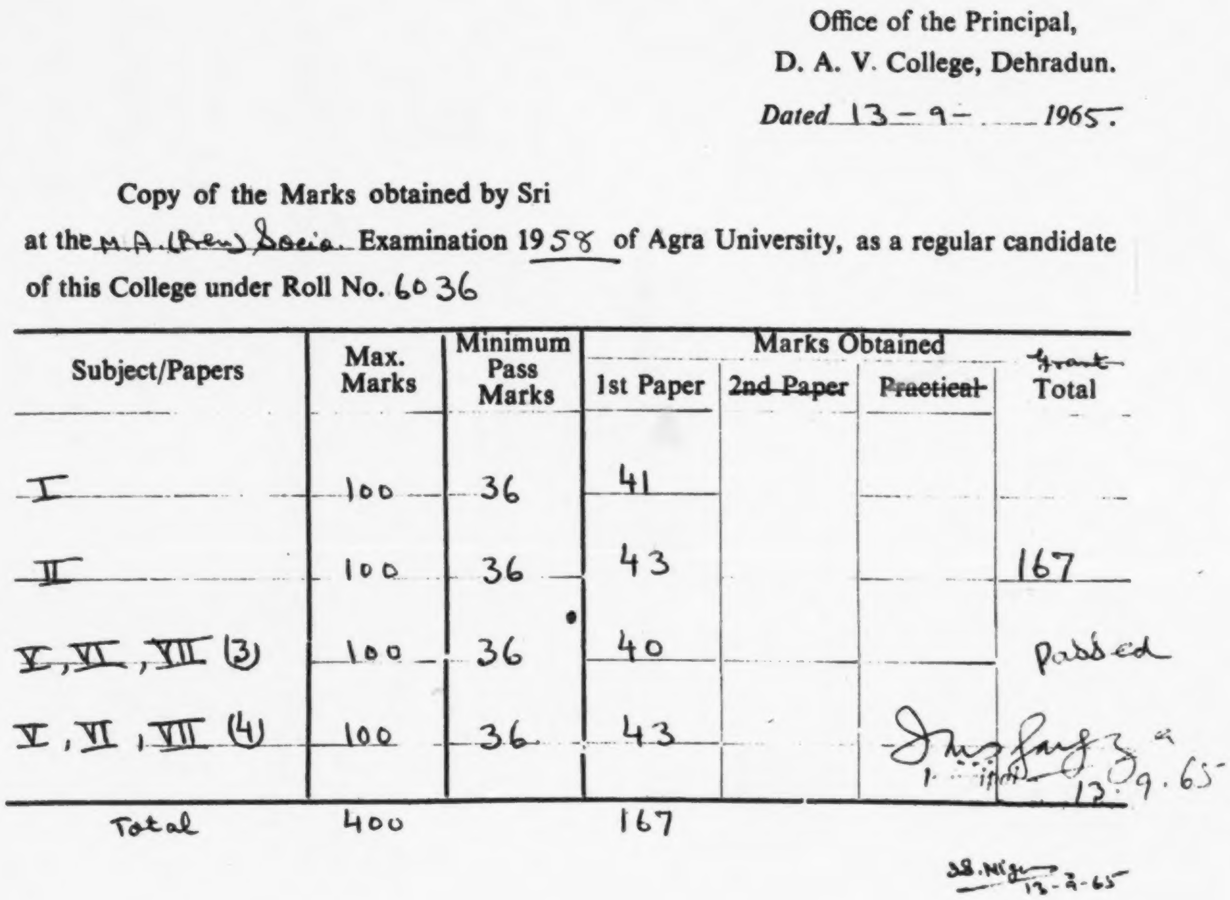
Conduct and character Good

Remarks

Principal

Modern Press, Agra.

FIGURE 19



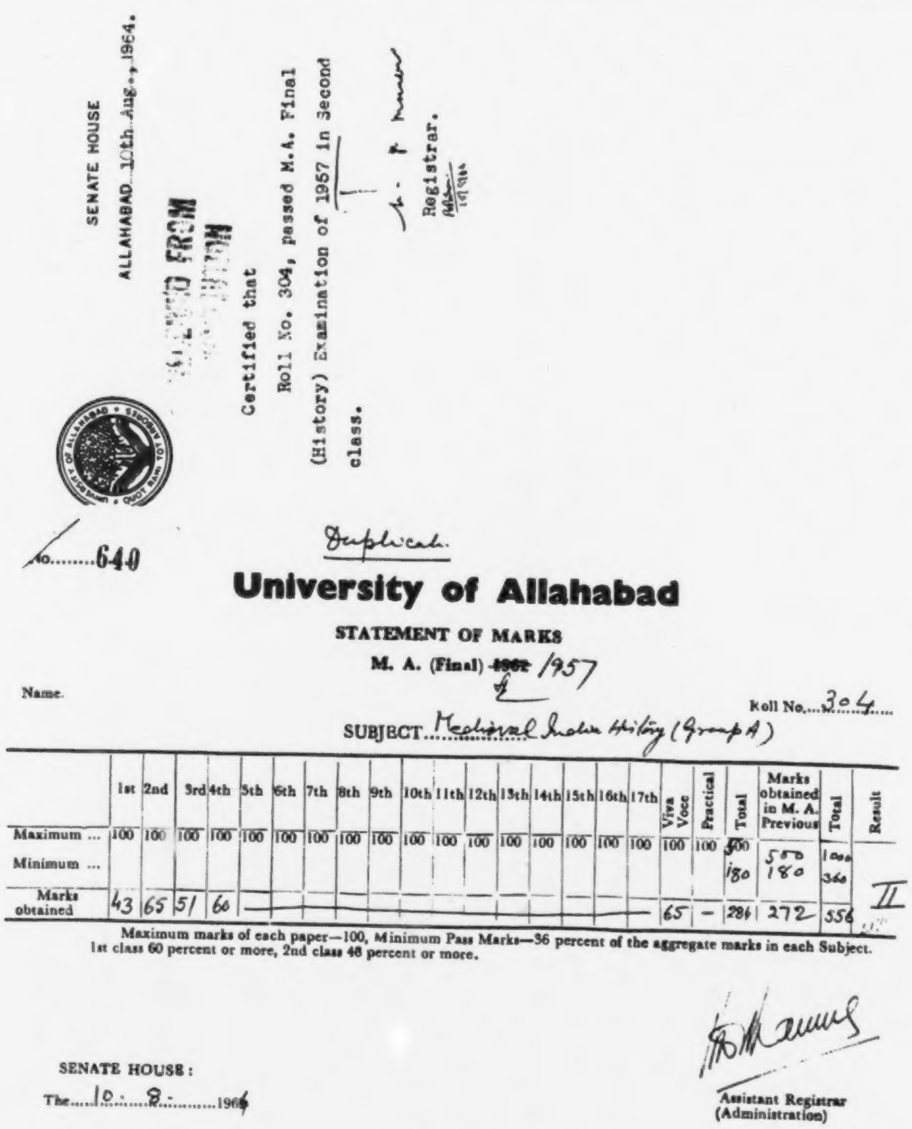
Office of the Principal,
D. A. V. College, Dehradun.
Dated 13-9- 1965.

Copy of the Marks obtained by Sri
at the M.A. (Prev) Socio. Examination 1958 of Agra University, as a regular candidate
of this College under Roll No. 6036

Subject/Papers	Max. Marks	Minimum Pass Marks	Marks Obtained			
			1st Paper	~~2nd Paper~~	~~Practical~~	~~Grant~~ Total
I	100	36	41			
II	100	36	43			167
V, VI, VII (3)	100	36	40			Passed
V, VI, VII (4)	100	36	43			13.9.65
Total	400		167			

13-9-65

FIGURE 20



SENATE HOUSE

ALLAHABAD 10th Aug., 1964.

[illegible] FROM

Certified that

Roll No. 304, passed M.A. Final (History) Examination of 1957 in Second class.

Registrar.

No........640

Duplicate.

University of Allahabad

STATEMENT OF MARKS

M. A. (Final) ~~1962~~ /1957

Name.

Roll No....304....

SUBJECT....Medieval Indian History (Group A)

	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	15th	16th	17th	Viva Voce	Practical	Total	Marks obtained in M. A. Previous	Total	Result
Maximum ...	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	500	500	1000	
Minimum ...																				180	180	360	
Marks obtained	43	65	51	60	—	—	—	—	—	—	—	—	—	—	—	—	—	65	–	284	272	556	II

Maximum marks of each paper—100, Minimum Pass Marks—36 percent of the aggregate marks in each Subject. 1st class 60 percent or more, 2nd class 48 percent or more.

SENATE HOUSE:

The....10 . 8 1964

Assistant Registrar
(Administration)

FIGURE 21

APPENDIX L

PRESS INFORMATION BUREAU
GOVERNMENT OF INDIA

PRESS NOTE

Relaxations in regulations for travel abroad.

1. Government has had under consideration for some time the question of making some relaxations in the present regulations regarding release of foreign exchange for education overseas and for travel abroad. It has been decided to make certain relaxations as summarized in this press note.

2. In the matter of foreign exchange release for those going for further education overseas, the following relaxations have been decided upon:

(a) At present, a student is required to have obtained not less than 60% marks in a degree examination in India to be eligible for release of foreign exchange. Hereafter, the qualifying marks would be lowered to 55%.

(b) At present, no foreign exchange is released in favour of any person unless he has passed a degree examination in India (with a minum of 60% marks now lowered to 55%.) It has now been decided that for all those fields of study where a degree course does not exist in India nor is an adequate diploma course available, foreign exchange will be released without insisting that the student concerned should be a graduate.

(c) At present, a student who goes abroad for further studies and who wins a foreign scholarship is required to curtail, to the extent of the value of the scholarship, the quantum of remittances from India. It has been decided that, in future, no such curtailment in remittance from India need to be made if the value of the scholarship earned abroad is for an amount not exceeding £ 300/-per annum. Where the amount exceeds £ 300-the adjustment need be made only for the portion in excess of £ 300/-.

3. In view of the high cost of education overseas and the need to provide some assistance to meritorious students. Government have decided to introduce a Scholarship Scheme under which 50 scholarships will be awarded every year. Further details about the scheme in regard to the amount of the scholarship, the courses for which they would be admissable, the form of application, the criteria for their award etc. are being separately worked by the Ministry of Education and these details will be notified separately.

4. In respect of travel abroad, Government have decided that all those who have not been abroad for a period of 3 years will be exempt from the operation of 'P' form control in respect of one visit abroad. For such a visit, no sponsorship declaration will be required nor will it be necessary for the person concerned to indicate who would be the host abroad. The period of 3 years will be reckoned backwards from the date of commencement of the proposed visit abroad. Thus, anyone who has not been abroad since 1st March 1967 would be in a position under this rule to make a trip of his choice commencing 1st March 1970. Likewise, for later dates, the period of 3 years will be similarly reckoned backwards on a date to date basis. This facility would be in addition to the travel facilities already admissible under the present (P) form regulations.

5. Those going abroad under the above scheme and travelling by Air India will be given foreign exchange equivalent to $100/- for the entire trip by the Reserve Bank.

6. The following other relaxations of a general nature have been decided upon:

(a) In the matter of travel abroad to attend conferences, in future, there would be no restriction on numbers when there is hospitality from an institutional source in respect of the expenses of the stay abroad.

(b) In future, anyone who goes abroad will have the discretion to spend an additional 15 days abroad on his own. This could be utilized to make en-route halts or to visit nearby countries. No additional foreign exchange will, however, be released for the extended period.

(c) Visits abroad of sportsmen who have attained a certain minimum standard as adjudged by the competent sports body will also be liberalised.

(d) The present restriction about wives not being allowed to accompany their husbands for conferences or business visits and the like will be somewhat relaxed so that, in appropriate cases, the Reserve Bank would give foreign exchange facilities also for the wives.

7. Procedurally, it is being arranged that the foreign exchange release of $100/- indicated above as also the facility to make remittances in favour of students who go for education overseas will be relegated by the Reserve Bank to a number of banks all over the country. The basic objective is that, within a short time, these facilities would be available locally in every city with a population of lakh (100,000) people or more.

8. The changes indicated in paragraphs, 2, 4, 5 and 6 above will become effective from 1st March 1970 from which date the Reserve Bank will entertain applications on the revised basis. The procedural change indicated in para 7 is expected to come into force from 1st April 1970.

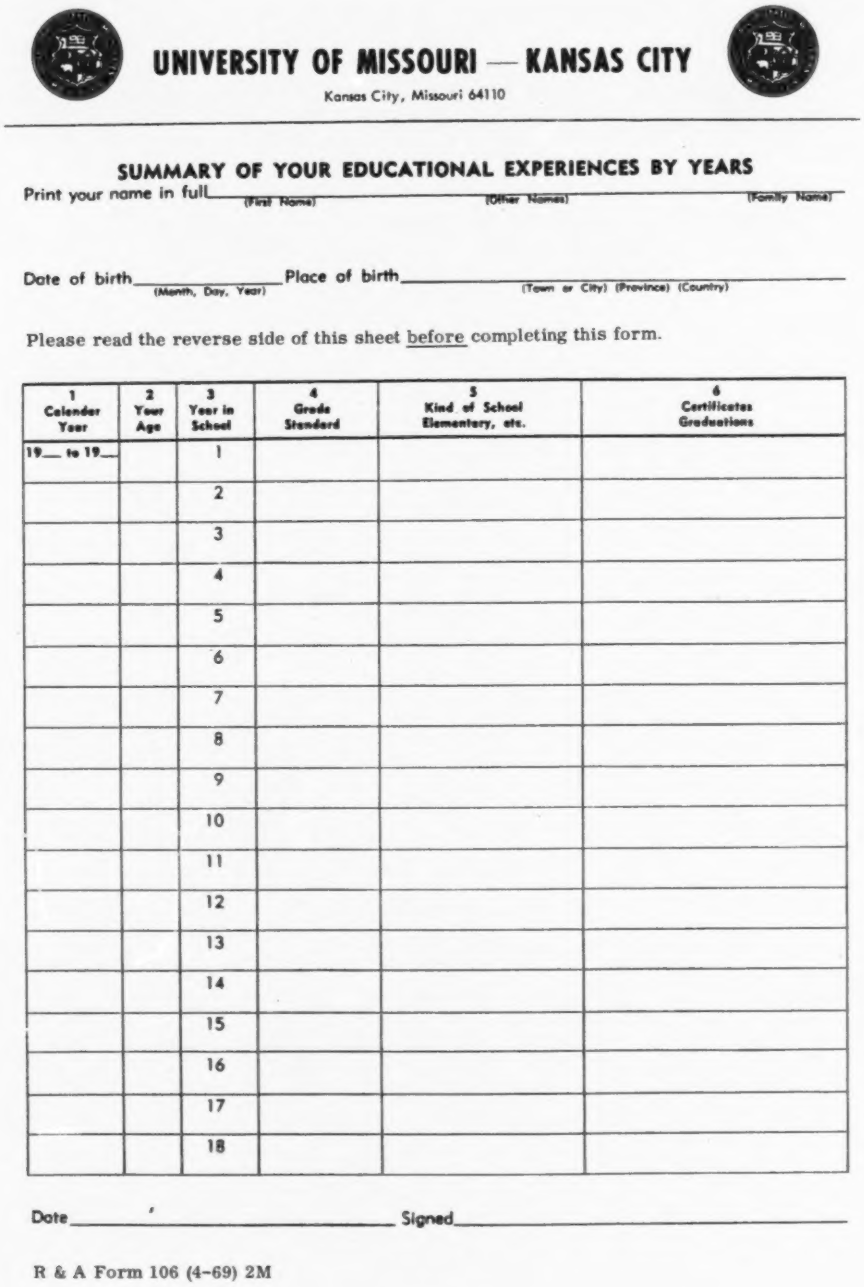
Ministry of Finance
Department of Economic Affairs
New Delhi, the 18th February 1970

APPENDIX M

Samples of Forms

In this appendix, samples of certain forms cited in the text as ones having value in the admission, evaluation and placement of Indian students have been provided for consideration by U.S. institutions.

Figure 1 - Summary of Education Experiences by Years (front)
Figure 2 - Summary of Educational Experiences by Years (reverse)
Figure 3 - Syllabus of Degree Course
Figure 4 - Confidential Report by Referee (front)
Figure 5 - Confidential Report by Referee (reverse)



UNIVERSITY OF MISSOURI — KANSAS CITY
Kansas City, Missouri 64110

SUMMARY OF YOUR EDUCATIONAL EXPERIENCES BY YEARS

Print your name in full____________ (First Name) ____________ (Other Names) ____________ (Family Name)

Date of birth____________ (Month, Day, Year) Place of birth____________ (Town or City) (Province) (Country)

Please read the reverse side of this sheet before completing this form.

1 Calendar Year	2 Your Age	3 Year in School	4 Grade Standard	5 Kind of School Elementary, etc.	6 Certificates Graduations
19__ to 19__		1			
		2			
		3			
		4			
		5			
		6			
		7			
		8			
		9			
		10			
		11			
		12			
		13			
		14			
		15			
		16			
		17			
		18			

Date____________ Signed____________

R & A Form 106 (4-69) 2M

FIGURE 1

Explanation and Directions:

As you complete the form on the reverse side, please consider the following:

Use ink and print very legibly.

What we wish to obtain is a chronological record of your school attendance, showing when you started school, how far you went, the classes you attended, the kind of schools you attended, the certificates you earned, the examinations you passed, and your graduations.

In Column (1) fill in the calendar years, that is, write in the appropriate year on each line for every school year you attended.

In Column (2) write your age. Perhaps you were six years old when you went to school for the first time, so write six on the first line; continue by putting your correct age for each grade you attended.

Column (3) represents the actual years you attended school. Your first year is No. 1, your second year is No. 2, etc.

In Column (4) write for each school year the standard, grade, form, class, sixieme, cinquieme, sexta, quita, or whatever may be the name of the class or level you attended that year.

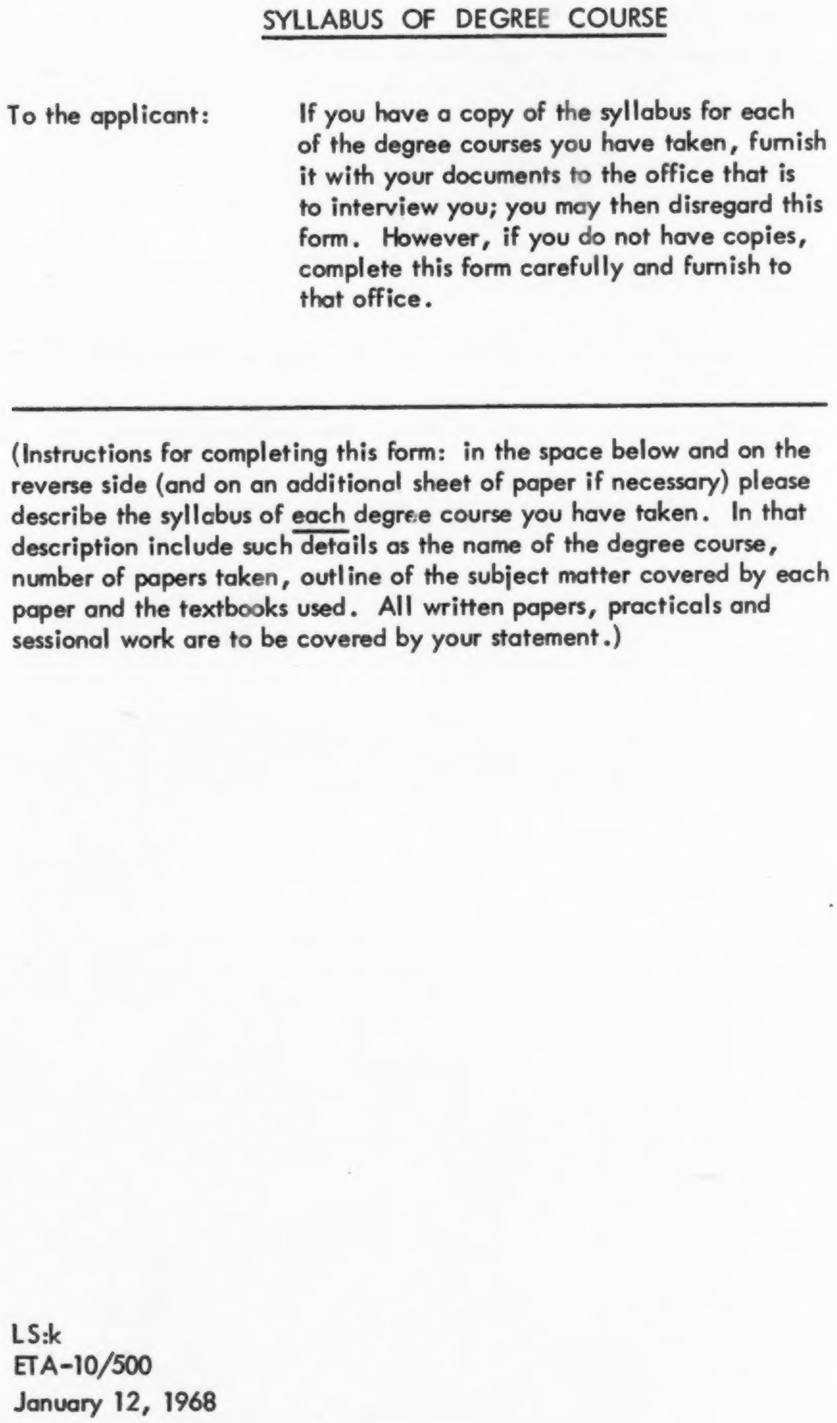
In Column (5) write the kind of school you attended such as Kindergarten, Grade School, Elementary School, Grundschule, Volkschule, Mittelschule, Gymnasium, Realgymnasium, Aufbauschule, Ecole Superieure, Trade School, College Preparatory, High School, Grammar School, Teachers College, University, etc.

In Column (6) write the name of any examination(s) you passed or certificate(s) you obtained at the end of that school year. For example, if you completed High School at the close of your twelfth year in school, on that line write: "G. C. E.," "Reifezeugniss," "Studentereksamon," "Bachillerato," "Artium," "Baccalaureate II," etc, whatever is applicable in your case.

Please return this form with your admission application and your certified financial statement to:

Admissions Office
University of Missouri - Kansas City
Kansas City, Missouri 64110

FIGURE 2



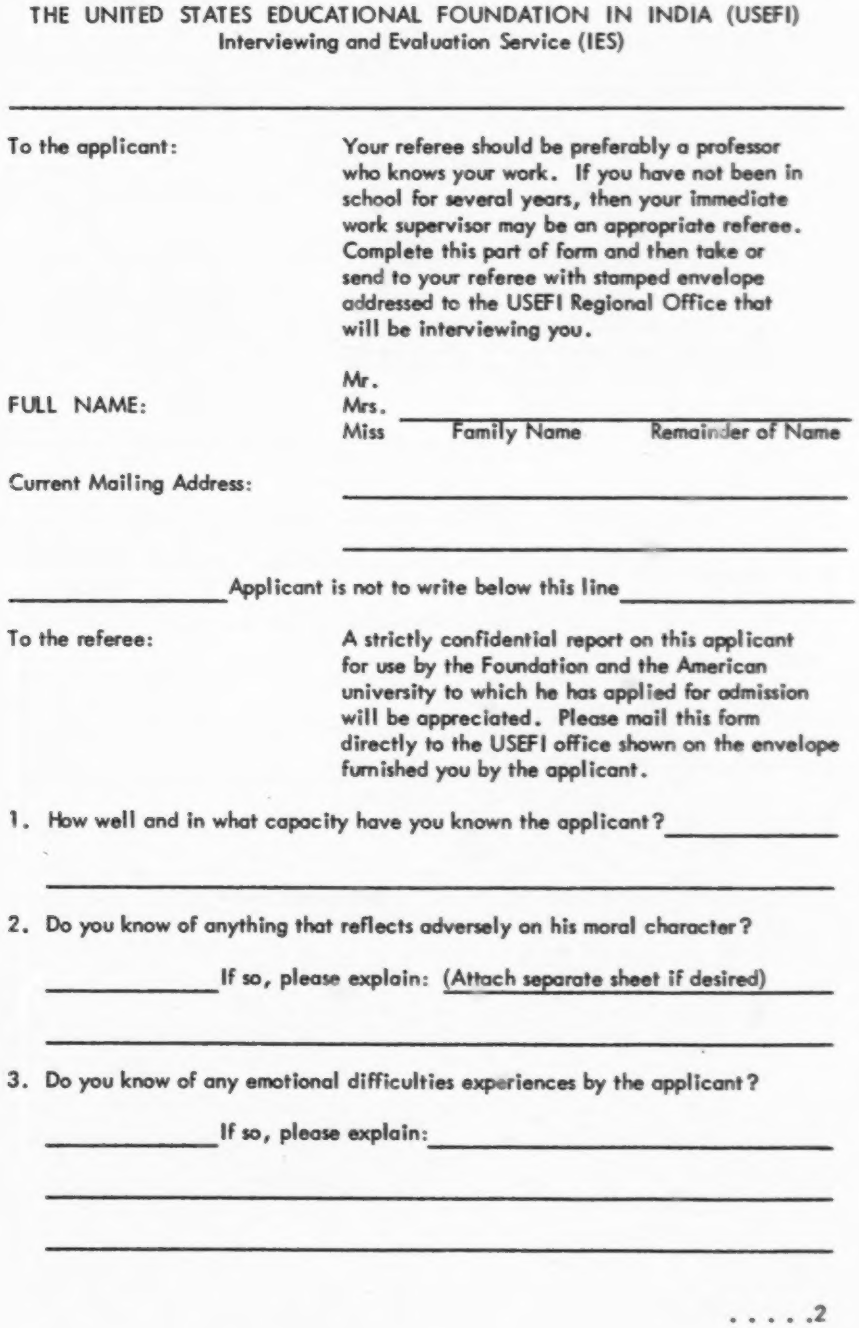
SYLLABUS OF DEGREE COURSE

To the applicant:	If you have a copy of the syllabus for each of the degree courses you have taken, furnish it with your documents to the office that is to interview you; you may then disregard this form. However, if you do not have copies, complete this form carefully and furnish to that office.

(Instructions for completing this form: in the space below and on the reverse side (and on an additional sheet of paper if necessary) please describe the syllabus of each degree course you have taken. In that description include such details as the name of the degree course, number of papers taken, outline of the subject matter covered by each paper and the textbooks used. All written papers, practicals and sessional work are to be covered by your statement.)

LS:k
ETA-10/500
January 12, 1968

FIGURE 3



THE UNITED STATES EDUCATIONAL FOUNDATION IN INDIA (USEFI)
Interviewing and Evaluation Service (IES)

To the applicant: Your referee should be preferably a professor who knows your work. If you have not been in school for several years, then your immediate work supervisor may be an appropriate referee. Complete this part of form and then take or send to your referee with stamped envelope addressed to the USEFI Regional Office that will be interviewing you.

FULL NAME: Mr. / Mrs. / Miss ____________ Family Name ____________ Remainder of Name

Current Mailing Address: ____________________

____

______ Applicant is not to write below this line ______

To the referee: A strictly confidential report on this applicant for use by the Foundation and the American university to which he has applied for admission will be appreciated. Please mail this form directly to the USEFI office shown on the envelope furnished you by the applicant.

1. How well and in what capacity have you known the applicant? ____________

____

2. Do you know of anything that reflects adversely on his moral character?

______ If so, please explain: (Attach separate sheet if desired) ______

____

3. Do you know of any emotional difficulties experiences by the applicant?

______ If so, please explain: ____________

____

____

. 2

FIGURE 4

4. Do you feel that the applicant would be able to adjust to a new educational system and a different culture without undue difficulty? ________________

   If not, please explain: ____

   ____

5. How would you rate the applicant's overall proficiency in English?

   Excellent__________ Good__________ Fair__________ Poor__________

6. Please rate the applicant's academic achievement and potential by entering an X in the appropriate spaces below, comparing the applicant with others in his field that you have known in recent years:

	Truly Excep-tional	Above Average		
	Top 5%	Top 50%	Lowest 50%	Unable to Judge
Intellectual potential				
Breadth of general knowledge				
Knowledge of his field of study				
Research ability in his field of study				

7. Please write a brief statement indicating the student's outstanding strengths and weaknesses. (Attach a separate sheet if desired.)

Date: ______________ Signature: ____________________

Institution: ________________________ Position ______________

LS:k
ETA-6/
November 29, 1967

FIGURE 5

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PUBLICATIONS OF AACRAO*

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The Home State and Migration of American College Students, Fall 1958, Nelson M. Parkhurst, Co-ordinator of the Study (1959). $2.

A Supplement to Home State and Migration of American College Students, Fall 1958 (1959). $1.

An Adequate Permanent Record and Transcript Guide (Revised 1965). Free.

Methodology of Enrollment Projections for Colleges and Universities, by L. J. Lins (1960). I2.

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Executive Secretary
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The University Calendar (1961). $2.

Certification of Students Under Veterans Laws (1967). Free.

Publications currently out of print but available for reference in most registrar-admission offices and many libraries.

WORLD EDUCATION SERIES: *Guide to the Academic Placement of Students from Foreign Countries in U.S. Institutions:* Canada (1957), Korea (1958), Mexico (1961).

Placement Guides to Accompany U. S. Office of Education Publications: Scandinavian Study Tour (1959), Thailand (1959), the Netherlands (1961), Afghanistan (1961), Austria (1961), Caribbean (1961), Venezuela (1961), Philippines (1962), Tanganyika (1961), Argentina (1962).

Handbook of Data and Definitions in Higher Education (1962).

Electronic Data Processing Survey (1967).

Selective Service Certification Manual (1966.)

Office Machine Equipment (1959), Supplement (1961).

Enrollment Projections for Higher Education, 1961-1978, by Ronald B. Thompson (1961).

Normative Data on the Utilization of Instructional Space in Colleges and Universities, by James I. Doi and Keith L. Scott (1960).

Retention of Records (1960).

Catalogues Are for Students Too (1958).

Analysis and Design of Office Forms (1958).

Manual for Studies of Space Utilization in Colleges and Universities, by John Dale Russell and James Doi (1957).

A Glossary of Terms Used by Registrars and Admissions Officers, by Robert E. Mahn (1956).

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AACRAO Policies and Procedures (A Handbook) (1953).

Topical Index of COLLEGE AND UNIVERSITY through Volume 25, by Robert E. Mahn (1951). All later volumes are indexed in the Summer issue of each year.